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*Via Electronic and US Mail*

June 25, 2015

Joseph A. Gowers  
Remedial Project Manager  
Emergency and Remedial Response Division  
USEPA Region II  
290 Broadway, 19<sup>th</sup> Floor  
New York, New York 10007-1866

Re: Ringwood Mines/Landfill Superfund Site  
June 2015 Supplemental Groundwater and Surface Water Sampling

Dear Mr. Gowers:

On June 1st through 3rd, 2015, Cornerstone Engineering Group, LLC, on behalf of Ford Motor Company (Ford), completed a supplemental sampling event for groundwater and surface water to aid in the assessment of benzene concentrations reported from the March 2015 sampling at Wells SC-01 and RW-6 that were inconsistent with typical historical results for these well locations. Well SC-01 is an angled overburden well located within the Peters Mine Pit (PMP) and well RW-6 is a bedrock well located immediately down-gradient of the PMP.

Samples collected by Cornerstone were submitted under chain of custody to Test America Laboratories. This supplemental sampling event included the following scope of work:

- Groundwater sampling from PMP Area monitoring wells SC-01, RW-6, RW-6A, OB-11R, OB-20A, OB-20B and OB-27.
- Groundwater sampling from the 50', 180', and 230' depth intervals in the PMP Air Shaft.
- Surface water sampling at the PMP Pond, SR-3 Seep, and Park Brook locations PAB-00, PAB-01, and PAB-01A.
- Quality controls samples including a field blank, a blind duplicate (collected at well OB-20B), and two trip blanks.

The sampling locations are shown on the attached figure excerpted from Attachment 1 of the Remedial Investigation (RI) Report for the Peters Mine Pit Area, prepared by Arcadis, July 2012. Groundwater samples were collected using the low-flow sampling methodology. Field sampling data sheets are attached for reference. Samples were analyzed for the Target Compound List (TCL) volatile organic compounds (VOCs) plus the next 15 tentatively identified compounds (TICs).

Mr. Joseph A. Gowers

June 25, 2015

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Two summary tables are attached: (1) a summary of the data set from Cornerstone's June 2015 sampling, and (2) an update of Table 13 from the Site-Related Groundwater RI Report, prepared by Arcadis, dated January 2015 which provides comparative historical data. Full laboratory reports showing the analytical results and chain of custody are also attached for reference. Data validation of the Test America analytical results was performed by Cadena, and the data validation reports are attached for reference.

As shown, the results of this supplemental sampling event are summarized as follows:

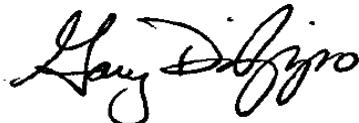
- Concentrations of VOCs in groundwater, including benzene, were at low levels consistent with historical concentrations and inconsistent with the September 2014 and March 2015 outlier concentrations. VOC TICs and other VOC parameters, including chloroethane, total xylenes, etc. were also reported at certain well locations at similar historical concentrations.
- Consistent with historic results, no VOCs were reported in any surface water sample collected from the PMP Pond, the SR-3 Seep sample, or within the adjacent Park Brook. Note that a trace concentration of acetone reported in the SR-3 Seep sample is attributed to laboratory contamination as noted in the enclosed data validation report.
- These data will be incorporated into an addendum to the RI Report as called for in the USEPA letter dated June 24, 2015.

The next sampling event will be conducted in late July/early August 2015 and will include the full scope of work for the Annual Groundwater Monitoring event as previously discussed with USEPA during the June 22, 2015 meeting. As discussed at the meeting, we understand USEPA intends to split samples at some or all well locations during this next sampling event. The schedule is being finalized and will be provided to the agencies shortly.

Please contact us if you have questions or comments on the enclosed submittal.

Sincerely,

CORNERSTONE ENGINEERING GROUP, LLC



Gary J. DiPippo, Professional Engineer.

NJ Lic. # 24GE02646100

Region Vice President

Enclosure

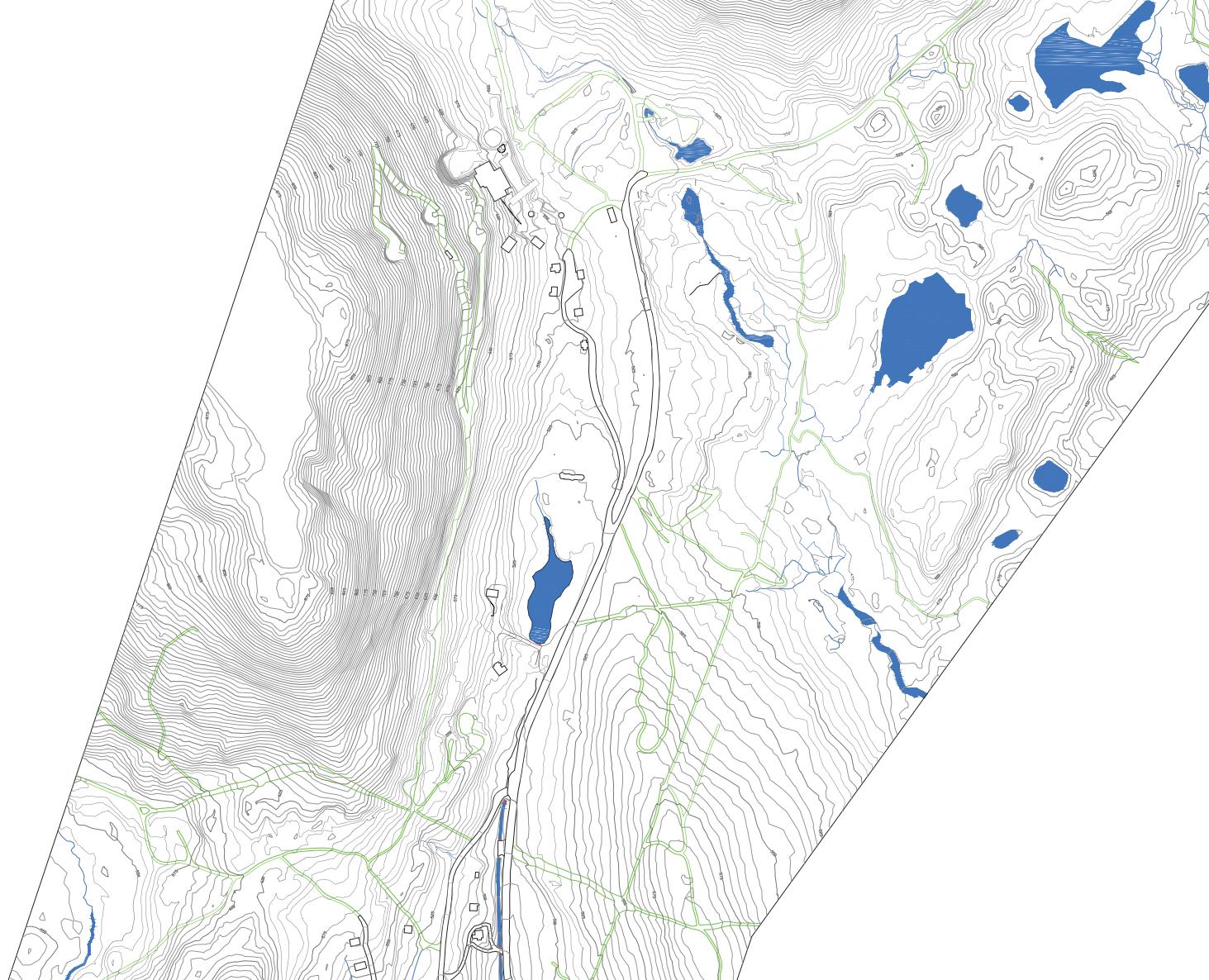
Mr. Joseph A. Gowers

June 25, 2015

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cc:    B. Bussa, Ford  
      T. Green, Ford OGC  
      J. Lagrotteria, LeClairRyan  
  
      D. Laguzza, LeClairRyan  
      K. Petrone, NJDEP

L. Dodge, Excel Environmental Resources, Inc.  
R. Harwood, Excel Environmental Resources, Inc.  
S. Heck, Borough of Ringwood  
W. Monahan, Sedita, Campisano & Campisano  
C. Coslett, de maximis  
Greg Albright, Arcadis



## Analytical Results Summary

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

**Laboratory:** TestAmerica - Nashville

Laboratory Submittal: 79645-1

**Analytical Results Summary**

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

Laboratory: TestAmerica - Nashville

Laboratory Submittal: 79645-1

Analyte	Sample Name: OB-20A-060115				FB-01-060115				OB-20B-060115				DUP-01-060115				
	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---												
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---												
Dichlorofluoromethane - TIC	75-43-4																
Ethyl ether - TIC	60-29-7																
Ethylbenzene	100-41-4	ND	0.50	ug/l	---												
Freon-113	76-13-1	ND	1.0	ug/l	---												
Hexane - TIC	110-54-3									0.16	0.50	ug/l	NJ	0.16	0.50	ug/l	NJ
Indan, 1-methyl- - TIC	767-58-8																
Indane - TIC	496-11-7									4.9	---	ug/l	NJ				
Isopropyl alcohol - TIC	67-63-0																
Isopropylbenzene	99-82-8	ND	1.0	ug/l	---												
Methyl acetate	79-20-9	ND	10	ug/l	---												
Methyl methacrylate - TIC	80-62-6																
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---												
Methylcyclohexane	108-87-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.50	0.50	ug/l	---	0.44	0.50	ug/l	J
Methylene Chloride	75-09-2	ND	3.0	ug/l	---	1.6	3.0	ug/l	J	ND	3.0	ug/l	---	ND	3.0	ug/l	---
n-Butylbenzene - TIC	104-51-8																
N-Propylbenzene - TIC	103-65-1																
Naphthalene - TIC	91-20-3									1.7	5.0	ug/l	NJ	1.7	5.0	ug/l	NJ
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10																
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11																
o-Xylene - TIC	95-47-6																
Styrene	100-42-5	ND	0.50	ug/l	---												
Tetrachloroethene	127-18-4	ND	0.50	ug/l	---												
Tetrahydrofuran - TIC	109-99-9																
Toluene	108-88-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.19	0.50	ug/l	J
Total Alkanes TIC - TIC	TIC1									1.6	---	ug/l	NJ				
Total Alkanes TIC - TIC	TIC10													1.4	---	ug/l	NJ
Total Alkanes TIC - TIC	TIC15																
trans-1,2-Dichloroethene	156-60-5	ND	0.50	ug/l	---												
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	ug/l	---												
trans-Cinnamyl bromide - TIC	TIC1													4.7	---	ug/l	NJ
trans-Cinnamyl bromide - TIC	TIC12																
Trichloroethene	79-01-6	ND	0.50	ug/l	---												
Trichlorofluoromethane	75-69-4	ND	0.50	ug/l	---												
Vinyl chloride	75-01-4	ND	0.50	ug/l	---												
Xylenes, Total	1330-20-7	ND	1.0	ug/l	---												

## Analytical Results Summary

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

Laboratory: TestAmerica - Nashville

Laboratory Submittal: 79645-1

Analyte	Sample Name: OB-27-060115				OB-11R-060115				SR-3-SEP-060115				RW-6A-060115				
	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
GC/MS VOC																	
OSW-8260C																	
1,1,1-Trichloroethane	71-55-6	ND	0.50	ug/l	---												
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.50	ug/l	---												
1,1,2-Trichloroethane	79-00-5	ND	0.50	ug/l	---												
1,1-Dichloroethane	75-34-3	0.25	0.50	ug/l	J	0.24	0.50	ug/l	J	ND	0.50	ug/l	---	0.28	0.50	ug/l	J
1,1-Dichloroethene	75-35-4	ND	0.50	ug/l	---												
1,2,4-Trichlorobenzene	120-82-1	ND	0.50	ug/l	---												
1,2,4-Trimethylbenzene - TIC	95-63-6																
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.0	ug/l	---												
1,2-Dibromoethane	106-93-4	ND	0.50	ug/l	---												
1,2-Dichlorobenzene	95-50-1	ND	0.50	ug/l	---												
1,2-Dichloroethane	107-06-2	0.22	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichloropropane	78-87-5	ND	0.50	ug/l	---												
1,3,5-Trimethylbenzene - TIC	108-67-8																1.4
1,3-Dichlorobenzene	541-73-1	ND	0.50	ug/l	---												
1,4-Dichlorobenzene	106-46-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.18	0.50	ug/l	J
1,4-Dioxane - TIC	123-91-1																
1H-Indene, 2,3-dihydro-1,6-dimethyl - TIC	TIC9	5.0	---	ug/l	NJ												
1H-Indene, 2,3-dihydro-4,5,7-trimethyl - TIC	TIC5					2.5	---	ug/l	NJ								
1H-Indene, 2,3-dihydro-4,6-dimethyl - TIC	TIC8	7.2	---	ug/l	NJ												
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC17	7.9	---	ug/l	NJ												
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC6					3.9	---	ug/l	NJ								
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---												
2-Butenal, (E) - TIC	123-73-9																
2-Hexanone	591-78-6	ND	5.0	ug/l	---												
2-Methyl-2-propanol - TIC	75-65-0																
3-Phenylbut-1-ene - TIC	934-10-1																4.2
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---												
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	4.5	5.0	ug/l	UB	ND	5.0	ug/l	---
Benzene	71-43-2	3.0	0.50	ug/l	---	2.9	0.50	ug/l	---	ND	0.50	ug/l	---	9.1	0.50	ug/l	---
Benzene, (2-bromocyclopropyl) - TIC	TIC19																
Benzene, (2-bromocyclopropyl) - TIC	TIC3																
Benzene, (3-methyl-2-butenyl) - TIC	TIC14	5.9	---	ug/l	NJ												
Benzene, (3-methyl-2-butenyl) - TIC	TIC4					2.6	---	ug/l	NJ								
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi - TIC	TIC1																17
Benzene, 1,2,3,4-tetramethyl - TIC	488-23-3																
Benzene, 1,2,3,5-tetramethyl - TIC	527-53-7					3.4	---	ug/l	NJ								4.6
Benzene, 1,2,3-trimethyl - TIC	526-73-8																20
Benzene, 1,2,4,5-tetramethyl - TIC	TIC18	12	---	ug/l	NJ												11
Benzene, 1,2,4,5-tetramethyl - TIC	TIC2																
Benzene, 1,2,4,5-tetramethyl - TIC	TIC5																
Benzene, 1,2,4,5-tetramethyl - TIC	TIC7																
Benzene, 1,2-diethyl - TIC	135-01-3																
Benzene, 1-ethenyl-4-ethyl - TIC	TIC13	5.5	---	ug/l	NJ												
Benzene, 1-ethenyl-4-ethyl - TIC	TIC2																
Benzene, 1-ethyl-2,4-dimethyl - TIC	874-41-9																13
Benzene, 1-methyl-2-(1-methylethyl) - TIC	TIC16	10	---	ug/l	NJ												
Benzene, 1-methyl-3-(1-methylethyl) - TIC	TIC4																
Benzene, 1-methyl-4-propyl - TIC	TIC20																2.6
Benzene, 2,4-dimethyl-1-(1-methylethyl) - TIC	TIC15	7.6	---	ug/l	NJ												
Benzene, 2-butenyl - TIC	TIC3					5.2	---	ug/l	NJ								
Benzene, 2-ethyl-1,4-dimethyl - TIC	2039-89-6	21	---	ug/l	NJ												15
Benzene, 4-ethyl-1,2-dimethyl - TIC	934-80-5																3.8
Bromoform	75-25-2	ND	0.50	ug/l	---												
Bromomethane	74-83-9	ND	0.50	ug/l	---												
Carbon disulfide	75-15-0	ND	0.50	ug/l	---												
Carbon tetrachloride	56-23-5	ND	0.50	ug/l	---												
Chlorobenzene	108-90-7	ND	0.50	ug/l	---												
Chlorodibromomethane	124-48-1	ND	0.50	ug/l	---												
Chloroethane	75-00-3	79	0.50	ug/l	---	22	0.50	ug/l	---	ND	0.50	ug/l	---	1.8	0.50	ug/l	---
Chloroform	67-66-3	ND	0.50	ug/l	---												
Chloromethane	74-87-3	ND	0.50	ug/l	---												
cis-1,2-Dichloroethene	156-59-2	0.30	0.50	ug/l	J	0.31	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	ug/l	---												
Cyclohexane	110-82-7	1.6	1.0	ug/l	---	1.9	1.0	ug/l	---	ND	1.0	ug/l	---	2.7	1.0	ug/l	---
Cyclopentane, methyl - TIC	96-37-7					3.9	---	ug/l	NJ					8.1	---	ug/l	NJ

**Analytical Results Summary**

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

Laboratory: TestAmerica - Nashville

Laboratory Submittal: 79645-1

Analyte	Sample Name: OB-27-060115				OB-11R-060115				SR-3-SEP-060115				RW-6A-060115				
	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---												
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---												
Dichlorofluoromethane - TIC	75-43-4																
Ethyl ether - TIC	60-29-7																
Ethylbenzene	100-41-4	ND	0.50	ug/l	---												
Freon-113	76-13-1	ND	1.0	ug/l	---												
Hexane - TIC	110-54-3					0.21	0.50	ug/l	NJ								
Indan, 1-methyl- - TIC	767-58-8	8.2	---	ug/l	NJ	3.0	---	ug/l	NJ					5.7	---	ug/l	NJ
Indane - TIC	496-11-7																
Isopropyl alcohol - TIC	67-63-0																
Isopropylbenzene	99-82-8	2.7	1.0	ug/l	---	0.53	1.0	ug/l	J	ND	1.0	ug/l	---	4.6	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---												
Methyl methacrylate - TIC	80-62-6																
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---												
Methylcyclohexane	108-87-2	0.89	0.50	ug/l	---	0.41	0.50	ug/l	J	ND	0.50	ug/l	---	0.72	0.50	ug/l	---
Methylene Chloride	75-09-2	ND	3.0	ug/l	---												
n-Butylbenzene - TIC	104-51-8																
N-Propylbenzene - TIC	103-65-1													4.7	0.50	ug/l	NJ
Naphthalene - TIC	91-20-3	5.7	5.0	ug/l	NJ									7.9	5.0	ug/l	NJ
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10	6.3	---	ug/l	NJ												
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11	4.8	---	ug/l	NJ												
o-Xylene - TIC	95-47-6																
Styrene	100-42-5	ND	0.50	ug/l	---												
Tetrachloroethene	127-18-4	ND	0.50	ug/l	---												
Tetrahydrofuran - TIC	109-99-9																
Toluene	108-88-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.61	0.50	ug/l	---
Total Alkanes TIC - TIC	TIC1	2.5	---	ug/l	NJ	6.4	---	ug/l	NJ								
Total Alkanes TIC - TIC	TIC10													12	---	ug/l	NJ
Total Alkanes TIC - TIC	TIC15																
trans-1,2-Dichloroethene	156-60-5	ND	0.50	ug/l	---												
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	ug/l	---												
trans-Cinnamyl bromide - TIC	TIC1					3.5	---	ug/l	NJ								
trans-Cinnamyl bromide - TIC	TIC12	12	---	ug/l	NJ												
Trichloroethene	79-01-6	ND	0.50	ug/l	---												
Trichlorofluoromethane	75-69-4	ND	0.50	ug/l	---												
Vinyl chloride	75-01-4	ND	0.50	ug/l	---												
Xylenes, Total	1330-20-7	ND	1.0	ug/l	---												

## Analytical Results Summary

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

**Laboratory:** TestAmerica - Nashville

Laboratory Submittal: 79645-1

**Analytical Results Summary**

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

Laboratory: TestAmerica - Nashville

Laboratory Submittal: 79645-1

Analyte	Sample Name: Trip Blank				SC-01-060215				Trip Blank				PMP-Pond-060215				
	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---	0.70	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorofluoromethane - TIC	75-43-4																
Ethyl ether - TIC	60-29-7																
Ethylbenzene	100-41-4	ND	0.50	ug/l	---	0.76	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3					0.33	0.50	ug/l	NJ								
Indan, 1-methyl- - TIC	767-58-8																
Indane - TIC	496-11-7																
Isopropyl alcohol - TIC	67-63-0	50	50	ug/l	NJ												
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	1.3	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl methacrylate - TIC	80-62-6																
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Methylcyclohexane	108-87-2	ND	0.50	ug/l	---	1.2	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Methylene Chloride	75-09-2	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
n-Butylbenzene - TIC	104-51-8					0.62	0.50	ug/l	NJ								
N-Propylbenzene - TIC	103-65-1					0.49	0.50	ug/l	NJ								
Naphthalene - TIC	91-20-3					4.9	5.0	ug/l	NJ								
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10																
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11																
o-Xylene - TIC	95-47-6					2.4	0.50	ug/l	NJ								
Styrene	100-42-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Tetrachloroethene	127-18-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Tetrahydrofuran - TIC	109-99-9																
Toluene	108-88-3	ND	0.50	ug/l	---	0.76	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Total Alkanes TIC - TIC	TIC1					6.2	---	ug/l	NJ								
Total Alkanes TIC - TIC	TIC10																
Total Alkanes TIC - TIC	TIC15																
trans-1,2-Dichloroethene	156-60-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
trans-Cinnamyl bromide - TIC	TIC1																
trans-Cinnamyl bromide - TIC	TIC12																
Trichloroethene	79-01-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Trichlorofluoromethane	75-69-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Vinyl chloride	75-01-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Xylenes, Total	1330-20-7	ND	1.0	ug/l	---	48	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---

## Analytical Results Summary

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

**Laboratory:** TestAmerica - Nashville

Laboratory Submittal: 79645-1

**Analytical Results Summary**
**June 2015 PMP Groundwater Sampling (Level 2 Data Validation)**
**CADENA Project ID:** E203361

**Laboratory:** TestAmerica - Nashville

**Laboratory Submittal:** 79645-1

Analyte	Sample Name: RW-6-060215				PMP-50-060215				PAB-00-060215				PAB-01-060215				
	Cas No.	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier	Result	Report Limit	Units	Valid Qualifier
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---												
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---												
Dichlorofluoromethane - TIC	75-43-4																
Ethyl ether - TIC	60-29-7																
Ethylbenzene	100-41-4	ND	0.50	ug/l	---												
Freon-113	76-13-1	ND	1.0	ug/l	---												
Hexane - TIC	110-54-3																
Indan, 1-methyl- - TIC	767-58-8																
Indane - TIC	496-11-7																
Isopropyl alcohol - TIC	67-63-0																
Isopropylbenzene	99-82-8	ND	1.0	ug/l	---												
Methyl acetate	79-20-9	ND	10	ug/l	---												
Methyl methacrylate - TIC	80-62-6																
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---												
Methylcyclohexane	108-87-2	ND	0.50	ug/l	---												
Methylene Chloride	75-09-2	ND	3.0	ug/l	---												
n-Butylbenzene - TIC	104-51-8																
N-Propylbenzene - TIC	103-65-1																
Naphthalene - TIC	91-20-3																
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10																
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11																
o-Xylene - TIC	95-47-6																
Styrene	100-42-5	ND	0.50	ug/l	---												
Tetrachloroethene	127-18-4	ND	0.50	ug/l	---												
Tetrahydrofuran - TIC	109-99-9																
Toluene	108-88-3	0.37	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Total Alkanes TIC - TIC	TIC1	0.14	---	ug/l	NJ												
Total Alkanes TIC - TIC	TIC10																
Total Alkanes TIC - TIC	TIC15																
trans-1,2-Dichloroethene	156-60-5	ND	0.50	ug/l	---												
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	ug/l	---												
trans-Cinnamyl bromide - TIC	TIC1																
trans-Cinnamyl bromide - TIC	TIC12																
Trichloroethene	79-01-6	ND	0.50	ug/l	---												
Trichlorofluoromethane	75-69-4	ND	0.50	ug/l	---												
Vinyl chloride	75-01-4	ND	0.50	ug/l	---												
Xylenes, Total	1330-20-7	ND	1.0	ug/l	---												

## Analytical Results Summary

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

**Laboratory:** TestAmerica - Nashville

Laboratory Submittal: 79645-1

**Analytical Results Summary**

June 2015 PMP Groundwater Sampling (Level 2 Data Validation)

CADENA Project ID: E203361

Laboratory: TestAmerica - Nashville

Laboratory Submittal: 79645-1

Analyte	Sample Name: PAB-02-060215				PMP-180-060315				PMP-230-060315				
	Cas No.	Result	Report	Units	Valid Qualifier	Result	Report	Units	Valid Qualifier	Result	Report	Units	Valid Qualifier
			Limit				Limit				Limit		
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorofluoromethane - TIC	75-43-4					0.28	0.50	ug/l	NJ				
Ethyl ether - TIC	60-29-7									0.93	5.0	ug/l	NJ
Ethylbenzene	100-41-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC	110-54-3					0.21	0.50	ug/l	NJ	0.21	0.50	ug/l	NJ
Indan, 1-methyl- - TIC	767-58-8												
Indane - TIC	496-11-7												
Isopropyl alcohol - TIC	67-63-0												
Isopropylbenzene	99-82-8	ND	1.0	ug/l	---	0.81	1.0	ug/l	J	4.9	1.0	ug/l	---
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---
Methyl methacrylate - TIC	80-62-6									0.68	5.0	ug/l	NJ
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Methylcyclohexane	108-87-2	ND	0.50	ug/l	---	0.20	0.50	ug/l	J	0.23	0.50	ug/l	J
Methylene Chloride	75-09-2	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---
n-Butylbenzene - TIC	104-51-8												
N-Propylbenzene - TIC	103-65-1									0.62	0.50	ug/l	NJ
Naphthalene - TIC	91-20-3									2.9	5.0	ug/l	NJ
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10												
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11												
o-Xylene - TIC	95-47-6												
Styrene	100-42-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Tetrachloroethene	127-18-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Tetrahydrofuran - TIC	109-99-9									3.5	5.0	ug/l	NJ
Toluene	108-88-3	ND	0.50	ug/l	---	140	0.50	ug/l	---	80	0.50	ug/l	---
Total Alkanes TIC - TIC	TIC1					1.2	---	ug/l	NJ	1.8	---	ug/l	NJ
Total Alkanes TIC - TIC	TIC10												
Total Alkanes TIC - TIC	TIC15												
trans-1,2-Dichloroethene	156-60-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
trans-Cinnamyl bromide - TIC	TIC1												
trans-Cinnamyl bromide - TIC	TIC12												
Trichloroethene	79-01-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Trichlorofluoromethane	75-69-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Vinyl chloride	75-01-4	ND	0.50	ug/l	---	0.19	0.50	ug/l	J	ND	0.50	ug/l	---
Xylenes, Total	1330-20-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.61	1.0	ug/l	J

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**  
**Updated June 2015 (Level 2 Data Validation)**  
**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
CM SHAFT	50'	5/7/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/12/2014	< 0.21	< 2.6	< 3.8 B	< 2.6	< 1.3	NA	NA
	100'	5/7/2012	< 0.22	< 0.97	1.7 B	< 0.97	< 1.7	NA	NA
		9/18/2014	< 0.21	R	2.4 J	R	< 1.3	NA	NA
	160'	5/9/2012	< 0.22	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
		9/18/2014	< 0.21	< 2.6	13.2 J	< 2.6	< 3.0 B	NA	NA
	275'	5/9/2012	< 0.22	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
		9/19/2014	< 0.21	< 2.6	104	< 2.6	< 3.0 B	NA	NA
OB-01	5-31'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/8/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/20/2011	< 0.26	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
		4/26/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-02	8-42'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	2.0	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	3.2	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.8 B	< 1.7	< 1.4	NA	NA
		9/17/2008	< 0.26	< 1.7	< 1.4	1.7 B	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/16/2011	< 0.26	< 0.92	1.3 B	< 0.92	< 1.1	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/18/2013	< 0.28	< 1.5	2.6 B	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 3.0 B	< 1.3	NA	NA

**Table 13**  
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**Updated June 2015 (Level 2 Data Validation)**  
**Site-Related Groundwater Remedial Investigation Report**  
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**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-03	9-24'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/9/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-04	28-61'	10/14/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/29/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	4.1	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	1.1 B	1.2 B	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 0.97	1.9 J	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	1.7 B	< 3.9 B	2.2 B	< 3.4 B	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-05	18-63'	10/15/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	2.6 B	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.5 B	< 1.7	1.4 B	NA	NA
		9/9/2008	< 0.26	< 1.7	1.7 B	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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**Groundwater Monitoring Results: 2004-2014**  
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**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-06	10-36'	11/2/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	< 1.4	< 1.7	1.9 B	NA	NA
		9/8/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-07	14-42'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/11/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	2.9 B	2.0 B	1.9 B	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	1.2 B	< 0.92	1.3 B	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/12/2013	< 0.28	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
		11/12/2013	< 0.28	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
		9/5/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/5/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-10	10-20'	10/14/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/2/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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**Groundwater Monitoring Results: 2004-2014**  
**Updated June 2015 (Level 2 Data Validation)**  
**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-11	25-40'	10/14/2004	1.2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
OB-11R	25-40'	6/11/2010	5.2	24.9	< 1.9	3.8	< 1.9	NA	NA
		5/18/2011	3.7	23.9	7.4	19.5	2.4 B	NA	NA
		4/26/2012	3.7	21.0	4.5	7.5 J	3.7 J	NA	NA
		11/8/2013	4.7	25.3	< 2.4	7.3	< 2.4	NA	NA
		9/11/2014	3.5	26.6	< 1.3	6.1	< 1.3	31.2	0.4 J
		9/11/2014	NA	NA	NA	NA	NA	31	< 0.2
		3/20/2015	3.2	NA	NA	NA	NA	NA	NA
		4/21/2015	2.9	NA	NA	NA	NA	NA	NA
		6/1/2015	2.9	NA	NA	NA	NA	NA	NA
OB-12	9-40'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/9/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/18/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-13	8-60'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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OB-14A	4-14'	10/12/2004	< 0.50	16.7	< 3.0	19.6	< 3.0	NA	NA
		9/27/2006	< 0.21	4.5 J	< 2.6	5.5 J	< 2.6	NA	NA
		4/9/2007	< 0.21	2.4	3.3	< 1.5	2.9 B	NA	NA
		10/11/2007	< 0.19	23.1	1.4 B	5.6	< 0.94	NA	NA
		10/11/2007	< 0.19	21.6	1 B	5	1.2 B	NA	NA
		4/30/2008	< 0.26	14.4	4.0	3.8	2.7 B	NA	NA
		9/11/2008	< 0.26	2.3 BJ	< 1.4	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	3.8 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	2.8 B	< 3.6 B	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/11/2014	< 0.21	4.8	< 1.3	3.5	< 1.3	5.2	0.5 J
OB-14B	25-35'	10/12/2004	< 0.50	< 5.0	3.6	< 5.0	< 3.0	NA	NA
		9/27/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	2.8 B	1.1 B	1.6 B	< 0.94	NA	NA
		4/30/2008	< 0.26	2.1 B	3.2	< 1.7	2.1 B	NA	NA
		9/11/2008	< 0.26	2 BJ	< 1.4	2.6 BJ	< 1.4	NA	NA
		7/6/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	1.6 J	4.8 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 3	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/11/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-15B	25-35'	10/12/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/12/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/16/2007	< 0.19	< 1.1	1.0 B	< 1.1	< 0.94	NA	NA
		5/2/2008	< 0.26	< 1.7	2.6 B	< 1.7	2.1 B	NA	NA
		9/16/2008	< 0.26	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/11/2010	< 0.23	3.2	2.0 B	< 1.4	< 1.9	NA	NA
		5/23/2011	< 0.22	1.2 B	2.0 B	< 0.92	< 0.94	NA	NA
		4/24/2012	< 0.22	1.5 B	< 1.7	1.4 B	< 1.7	NA	NA
		11/20/2013	< 0.28 J	2.9 B	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	< 0.21	< 2.6	1.4 B	< 2.6	< 1.3	NA	NA

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OB-16	5-15'	10/12/2004	< 0.50	7.6	< 3.0	6.3	< 3.0	NA	NA
		9/27/2006	< 0.21	6.2	< 2.6	4.2	< 2.6	NA	NA
		4/10/2007	< 0.21	4.4	< 2.8	3.3	< 2.8	NA	NA
		10/10/2007	< 0.19	8.8	< 0.94	3.6	< 0.94	NA	NA
		5/1/2008	< 0.26	4.6	3.7	< 1.7	1.6 B	NA	NA
		9/11/2008	< 0.26	7.4	< 1.4	2.6 BJ	< 1.4	NA	NA
		7/8/2009	< 0.23	5.1	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	NA	6.1	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	NA	NA	NA	NA	NA	NA
		5/27/2010	< 0.23	7.8	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	9.1	< 3.0	6.0	< 3.0	NA	NA
		4/17/2012	< 0.22	6.9 J	< 1.7	< 3	1.8 B	NA	NA
		11/6/2013	< 0.28	9.9	< 2.4	6.4	< 2.4	NA	NA
		9/10/2014	< 0.21	4.7	1.3 B	< 2.6	1.8 B	12.7	0.8 J
OB-17	3-13'	10/11/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/27/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	3.5	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	2.5 B	1.7 B	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	2.3 B	< 1.7	2.4 B	NA	NA
		9/11/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/27/2010	< 0.23	1.9 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	1.9 B	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	3.5	< 1.3	< 2.6	< 1.3	NA	NA
OB-18	10-20'	10/11/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		4/10/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	1.2 B	< 1.1	1.0 B	NA	NA
		5/1/2008	< 0.26	< 1.7	< 1.4	< 1.7	1.8 B	NA	NA
		9/11/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/27/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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OB-19	5-20'	10/3/2006	0.55 J	3.1	9.4	< 1.5	< 2.6	NA	NA
		4/9/2007	0.59 J	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	1.9 B	1.3 B	< 1.1	1.1 B	NA	NA
		10/15/2007	< 0.19	1.8 B	1.0 B	< 1.1	< 0.94	NA	NA
		4/29/2008	0.56 J	< 1.7	1.4 B	< 1.7	< 1.4	NA	NA
		9/12/2008	0.37 J	4 J	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	1.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	0.39 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	0.29 J	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/20/2011	0.90 J	< 0.92	3.5	< 0.92	1.0 B	NA	NA
		4/25/2012	0.32 J	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	6.0	< 1.3	< 2.6	< 1.3	NA	NA
OB-20A	5-20'	10/4/2006	0.36 J	13.9	< 2.6	13.1	< 2.6	NA	NA
		4/3/2007	0.48 J	24.6	< 2.8	20.8	< 2.8	NA	NA
		10/11/2007	0.36 J	18.6	3	2.4 B	< 0.94	NA	NA
		4/29/2008	< 0.26	3.7	2.1 B	< 1.7	1.8 B	NA	NA
		9/15/2008	< 0.26	7.8	< 1.4	5.3	< 1.4	NA	NA
		7/9/2009	< 0.23	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
		10/28/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	< 0.23	7.9	1.9 B	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	5.6	< 0.92	1.0 J	NA	NA
		5/18/2011	< 0.22	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 3.0	3.0 J	< 3.0	< 1.7	NA	NA
		11/8/2013	< 0.28	7.2	11.2 J	3.4	< 2.4	NA	NA
		11/8/2013	< 0.28	5.7	< 2.4 J	2.2 B	< 2.4	NA	NA
		9/5/2014	< 0.21	7.7	< 1.3	3.9	< 1.3	NA	NA
		3/19/2015	<0.21	NA	NA	NA	NA	NA	NA
		4/21/2015	<0.24	NA	NA	NA	NA	NA	NA
		6/1/2015	<0.20	NA	NA	NA	NA	NA	NA
OB-20B	24-34'	10/4/2006	2.0	1.5 B	3.1	< 1.5	< 2.6	NA	NA
		10/4/2006	1.9	1.9 B	3.5	1.6 B	< 2.6	NA	NA
		4/5/2007	1.4	1.5 B	< 2.8	< 1.5	2.9 B	NA	NA
		4/5/2007	1.5	< 1.5	< 2.8	< 1.5	3.6	NA	NA
		10/11/2007	1.5	1.2 B	1.1 B	< 1.1	1 B	NA	NA
		4/29/2008	1.4	< 1.7	3.8	< 1.7	2.4 B	NA	NA
		9/15/2008	0.90 J	3.8	< 1.4	< 1.7	< 1.4	NA	NA
		7/9/2009	0.83 J	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	0.77 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	1.1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	0.86 J	< 0.92	2.5 B	< 0.92	2.2 B	NA	NA
		4/27/2012	0.66 J	< 0.97	2.8 J	< 0.97	< 1.7	NA	NA
		11/8/2013	0.52 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	0.37 J	2.7 B	< 1.3	2.9 B	< 1.3	NA	NA
		10/9/2014	0.40 J	3.9	< 1.3	3.1	< 1.3	NA	NA
		10/9/2014	0.40 J	3.4	< 1.3	3.7	< 1.3	NA	NA
		3/19/2015	0.46J	NA	NA	NA	NA	NA	NA
		4/21/2015	0.36J	NA	NA	NA	NA	NA	NA
		6/1/2015	0.27J	NA	NA	NA	NA	NA	NA

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OB-21	6-21'	10/5/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		10/5/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	10.4	29.2	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	9.0 B	27.0	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	2.1 B	< 1.7	< 1.4	NA	NA
		9/12/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	< 1.4	2.5 B	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
		4/24/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	2.9 B	< 1.3	< 2.6	< 1.3	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		4/20/2015	< 0.24	NA	NA	NA	NA	NA	NA
OB-22	10-20'	11/30/2006	< 0.21	9.5	19.5	< 1.5	< 2.8	NA	NA
		4/4/2007	< 0.21	5.2	9.1	< 1.5	< 2.8	NA	NA
		5/1/2008	< 0.26	< 1.7	2.3 B	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
		4/19/2012	< 0.22	NA	NA	NA	NA	NA	NA
OB-23	10-20'	11/28/2006	< 0.21	1.8 B	< 2.8 J	< 1.5	3.0 J	NA	NA
		4/11/2007	< 0.21	< 1.5	24.1	< 1.5	< 2.8	NA	NA
		5/2/2008	< 0.26	< 1.7	2.5 B	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	7.5	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	2.2 B	2.2 B	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	5.5 J	< 0.92	< 3.0	NA	NA
OB-24	5-15'	11/28/2006	< 0.21	< 1.5	2.8 B	< 1.5	< 2.8	NA	NA
		4/11/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	1.9 B	1.2 BJ	< 1.1	1.5 BJ	NA	NA
		4/30/2008	< 0.26	1.7 B	1.5 B	< 1.7	< 1.4	NA	NA
		4/30/2008	< 0.26	< 1.7	1.6 B	1.7 B	< 1.4	NA	NA
		9/11/2008	< 0.26	2.5 BJ	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	4.2 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 3.0 B	< 1.5	< 2.4	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	0.50	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-25	10-20'	11/30/2006	< 0.21	9.1 J	31.5 J	< 1.5	< 2.8	NA	NA
		11/30/2006	< 0.21	23.1 J	59.3 J	< 1.5	< 2.8	NA	NA
		4/12/2007	< 0.21	7.1	594	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	1.1 B	3.1	< 1.1	1.5 B	NA	NA
		4/29/2008	< 0.26	2.1 B	13.8	< 1.7	< 1.4	NA	NA
		9/18/2008	< 0.26	19.8	45.7	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	8.4 J	19.9	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	4.3	< 2.4	2.0 B	NA	NA
		6/1/2010	< 0.23	1.7 B	53.6	< 1.4	< 1.9	NA	NA
		5/20/2011	< 0.26	< 0.92	4.2	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	2.1 J	17.2	< 0.97	< 1.7	NA	NA
		11/12/2013	< 0.28	9.6 J	40.3	NA	NA	NA	NA
		9/9/2014	< 0.21	< 2.6	3.8	< 2.6	2.2 B	NA	NA
OB-26	9-24'	5/9/2008	< 0.26	< 1.7 B	1.7 B	< 1.7 B	1.5 B	NA	NA
		9/16/2008	< 0.26	2.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	5.0 J	< 0.97	< 1.7	NA	NA
OB-27	24.5-39.5'	6/1/2010	5.9	20.5	< 1.9	2.9 B	< 1.9	NA	NA
		5/18/2011	6.5	NA	NA	NA	NA	NA	NA
		4/25/2012	5.5	21.5	< 1.7	18.0	< 1.7	NA	NA
		11/11/2013	3.5	25.5	< 2.4	5.6	< 2.4	NA	NA
		11/11/2013	3.5	24.5	< 2.4	9.5	< 2.4	NA	NA
		9/10/2014	2.6	23.0	1.4 B	4.5	< 1.3	28	0.3 J
		3/20/2015	2.8	NA	NA	NA	NA	NA	NA
		4/21/2015	3.1	NA	NA	NA	NA	NA	NA
		6/1/2015	3.0	NA	NA	NA	NA	NA	NA
OB-28	3-18'	5/27/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	9.8	24.4	< 0.92	4.0 J	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 4.2 B	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	1.7 B	< 2.6	1.5 B	NA	NA
OB-29	18-35'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	1.6 B	NA	NA
OB-30A	8-18'	5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-30B	21-36'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-30C	40-50'	5/9/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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PM AIR SHAFT	50'	4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/16/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		4/24/2015	<0.24	NA	NA	NA	NA	NA	NA
		6/2/2015	<0.20	NA	NA	NA	NA	NA	NA
	180'	5/7/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/18/2008	26.4	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	7.4	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/29/2009	0.60 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/4/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	2.5	< 0.92	2.5 B	< 0.92	< 0.94	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/16/2014	6.6	< 2.6	13.3	< 2.6	1.5 B	NA	NA
		4/24/2015	2.3	NA	NA	NA	NA	NA	NA
		6/3/2015	5.4	NA	NA	NA	NA	NA	NA
	230'	5/7/2008	31.8	< 1.7	6.4	< 1.7	5.4	NA	NA
		9/18/2008	29.1	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	7.6	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/29/2009	31.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/4/2010	31.0	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	33.2	< 0.92	2.2 B	< 0.92	1.3 B	NA	NA
		4/24/2012	< 0.22	1.0 B	< 1.7	< 0.97	< 1.7	NA	NA
		4/24/2012	< 0.22	< 0.97	1.9 B	< 0.97	< 1.7	NA	NA
		7/11/2012	28.5	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/17/2014	32.9	4.2	3.4 J	4.9	2.2 J	NA	NA
		4/24/2015	7.8	NA	NA	NA	NA	NA	NA
		6/3/2015	25	NA	NA	NA	NA	NA	NA
RW-1	10-31'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/9/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	3.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	2.5 B	< 1.1	< 0.94	NA	NA
		5/6/2008	< 0.26	< 1.7	3.4	< 1.7	1.5 B	NA	NA
		9/18/2008	9.8	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	58-79'	4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/9/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	3.1	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/6/2008	< 0.26	< 1.7	2.0 B	< 1.7	2.2 B	NA	NA
		9/19/2008	8.6	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/19/2008	8.4	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

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RW-1	64-74'	6/30/2010	< 0.23	4.5	< 1.9	2.2 B	< 1.9	NA	NA
		5/26/2011	< 0.22	4.0	< 0.94	3.2	< 3.0	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	97-118'	4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/10/2006	< 0.21	< 1.5	< 2.6 J	< 1.5	4.5 J	NA	NA
		4/18/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/7/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		5/7/2008	< 0.26	< 1.7	1.9 B	< 1.7	2.6 B	NA	NA
		9/19/2008	2.0	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		3/30/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
	125-151'	10/10/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
		5/7/2008	< 0.26	< 1.7	2.1 B	< 1.7	2.2 B	NA	NA
		9/22/2008	6.2	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	2.3 B	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/30/2010	< 0.23	< 1.4	< 1.9	2.5 B	4.9	NA	NA
	131-141'	5/26/2011	< 0.22	2.3 B	< 0.94	1.0 B	< 0.94	NA	NA
		4/17/2012	< 0.22	3 J	< 1.7	< 3	< 1.7	NA	NA
		6/26/2012	NA	NA	NA	NA	NA	NA	NA
RW-2	19-20'	10/26/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/4/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	4.1	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	4.3	< 1.7	2.9 B	NA	NA
		9/16/2008	7.4	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/10/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	102-133	10/26/2004	< 1.0	< 5.0	7.3	< 5.0	< 3.0	NA	NA
		10/4/2006	< 0.21	< 1.5	< 2.6	< 1.5	3.2	NA	NA
		4/10/2007	< 0.21	< 1.5	11.2	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1 J	< 0.94	1.1 BJ	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	5.4	< 1.7	2.1 B	NA	NA
		9/17/2008	43.8	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/13/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

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RW-2	161-192'	10/27/2004	< 1.0	< 5.0	<b>64.6</b>	< 5.0	< 3.0	NA	NA
		4/16/2007	< 0.21	< 1.5	<b>14.0</b>	< 1.5	< 2.8	NA	NA
		10/16/2007	< 0.19	< 1.1	1.4 B	< 1.1	< 0.94	NA	NA
		7/13/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	278-309'	10/27/2004	< 1.0	< 5.0	<b>7.6 J</b>	< 5.0	< 3.0	NA	NA
		10/27/2004	< 1.0	< 5.0	<b>26.4 J</b>	< 5.0	3.2	NA	NA
		10/6/2006	< 0.21	< 1.5	2.8 B	< 1.5	3.6	NA	NA
		4/17/2007	< 0.21	< 1.5	<b>5.9</b>	< 1.5	<b>5.2</b>	NA	NA
		10/16/2007	< 0.19	< 1.1	3.2	< 1.1	< 0.94	NA	NA
		9/11/2008	< 6	< 1.7	<b>21.2</b>	< 1.7	< 1.4	NA	NA
		7/13/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/29/2010	< 0.23	3.0	< 1.9	<b>3.7</b>	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		5/8/2012	< 0.22	< 0.97	< 1.7	1.3 J	< 1.7	NA	NA
		11/19/2013	< 0.28	<b>3.8</b>	< 2.4	< 1.5	< 2.4	NA	NA
		9/26/2014	< 0.21	<b>5.2</b>	< 1.3	<b>4.1</b>	< 1.3	NA	NA
	441-472'	10/28/2004	< 1.0	<b>6.8</b>	<b>45.5</b>	< 5.0	<b>9.3</b>	NA	NA
		4/17/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/17/2007	< 0.19	1.3 B	3.3	< 1.1	< 0.94	NA	NA
		5/5/2008	< 0.26	< 1.7	<b>22.2</b>	< 1.7	3.9	NA	NA
		7/14/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/29/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/3/2011	0.24 J	< 3.0	< 3.0	<b>2.2 J</b>	< 3.0	NA	NA
		5/10/2012	0.23 J	2.5 B	< 1.7	< 3.0	< 1.7	NA	NA
		11/19/2013	< 0.28	< 1.5	< 2.4	<b>3.4</b>	< 2.4	NA	NA
		9/26/2014	< 0.21	<b>8.3</b>	<b>5.8</b>	<b>7.2</b>	1.8 B	NA	NA
RW-3	62-100'	10/29/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/29/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/5/2007	< 0.21	< 1.5	3.0	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	4.7	< 1.7	2.3 B	NA	NA
		9/8/2008	< 0.26	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/19/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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RW-3D	140-165'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	1.5 B	< 0.92	< 0.94	NA	NA
	170-181'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	1.9 B	< 0.92	< 0.94	NA	NA
		5/24/2011	< 0.22	1.6 B	1.5 B	< 0.92	< 0.94	NA	NA
	RW-3DD	4/30/2012	< 0.22	10.4	< 1.7	5.4	< 1.7	NA	NA
		11/12/2013	< 0.28	21.4	< 2.4	23.1	< 2.4	NA	NA
		9/12/2014	1.1	13.6 J	< 1.3	18.7 J	< 4.5 B	19.2	18
RW-3DS	155-160'	4/30/2012	< 0.22	7.4	< 1.7	3.3	< 1.7	NA	NA
		11/12/2013	< 0.28	< 5.9 B	3.5	8.1 J	< 3.0 B	NA	NA
		9/11/2014	< 0.21	9.6	< 1.3	11.8	< 1.3	NA	NA
RW-4	56-77'	10/22/2004	< 0.31	< 5.0	4.4	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	6.3	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	5.0	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	1.6 B	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	3.4	< 1.7	< 1.4	NA	NA
		9/15/2008	14.3	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	3.4 J	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	108-129'	10/22/2004	< 0.31	< 5.0	18.6	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	< 0.94	1.5 B	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	3.1	< 1.7	< 1.4	NA	NA
		9/16/2008	3.3	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	328-349'	10/25/2004	< 0.31	< 5.0	12.6	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	2.1 B	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	2.5 B	< 1.7	1.8 B	NA	NA
		9/9/2008	0.30 J	< 1.7	1.8 B	2.7 B	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/7/2011	< 0.05	< 0.92	1.3 B	< 0.92	1.4 B	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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RW-4	388-409'	10/25/2004	< 0.31	< 5.0	<b>12.5</b>	< 5.0	3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	<b>3.7</b>	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	<b>3.0 B</b>	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	<b>2.4 B</b>	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	<b>3.3</b>	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/8/2010	< 0.23	< 1.4	<b>3.2</b>	< 1.4	< 1.9	NA	NA
		6/8/2010	< 0.23	< 1.4	<b>2.7 B</b>	< 1.4	< 1.9	NA	NA
		6/25/2010	< 0.23	1.8 B	< 1.9	<b>5.4</b>	< 1.9	NA	NA
		6/25/2010	< 0.23	2.0 B	2.0 B	2.2 B	< 1.9	NA	NA
		5/25/2011	< 0.22	< 3.0	< 3.0	< 0.92	< 3.0	NA	NA
		4/26/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	<b>3.6</b>	<b>44.6</b>	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	<b>9.6</b>	<b>13.8</b>	< 2.6	2.6 B	NA	NA
RW-4A	62-72'	6/7/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/25/2010	1.5 B	< 1.9	< 1.4	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/8/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	113-123'	6/8/2010	< 0.23	3.0	< 1.9	<b>3.0</b>	< 1.9	NA	NA
		6/25/2010	< 0.23	2.6 B	< 1.9	<b>2.0 B</b>	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 3.0	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/8/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
RW-5	40-51'	9/27/2006	1.0	1.7 B	<b>68.4</b>	< 1.5	< 2.6	NA	NA
		4/13/2007	<b>1.9</b>	< 1.5	<b>44.3</b>	< 0.94	< 2.8	NA	NA
	64-76'	5/16/2006	<b>3.4</b>	<b>17.7</b>	<b>39.8</b>	NA	NA	NA	NA
		9/29/2006	< 0.21	< 1.5	<b>24.7</b>	< 1.5	< 7.8	NA	NA
		4/12/2007	<b>1.5</b>	< 1.5	<b>13.9</b>	NA	NA	NA	NA

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RW-5	99-120'	5/17/2006	3.0	< 3.1	3.3	< 3.1	< 2.6	NA	NA
		10/5/2006	1.8	4.7	32.7	< 1.5	< 2.6	NA	NA
		4/12/2007	2.6	< 1.5	7.0	< 1.5	4.6	NA	NA
		10/15/2007	1.8	< 1.1	1.5 B	< 1.1	1.0 B	NA	NA
		5/2/2008	0.89 J	4.1	< 1.4	< 1.7	< 1.4	NA	NA
		9/17/2008	0.41 J	2.4 B	< 1.4	1.8 B	< 1.4	NA	NA
		9/17/2008	0.42 J	2.3 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	0.26 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
		6/4/2010	0.24 J	NA	NA	NA	NA	NA	NA
		5/20/2011	< 0.26	1.1 B	< 0.94	< 0.92	1.3 B	NA	NA
		4/26/2012	< 0.22	< 3.0	1.9 J	< 3.0	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	9.4	4.7	7.9	1.4 B	NA	NA
RW-5A	54-74'	10/15/2007	< 0.19	< 1.1	1.9 B	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	8.6	2.9 B	11.8	2.5 B	NA	NA
		9/12/2008	< 0.26	10	2.2 BJ	9.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	< 0.23	3.5	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	2.6 B	< 1.9	2.7 B	< 1.9	NA	NA
		6/1/2010	< 0.23	3.6	< 1.9	2.1 B	< 1.9	NA	NA
		5/18/2011	< 0.22	2.2 B	1.6 J	1.1 B	< 0.94	NA	NA
		4/25/2012	< 0.22	4.9 J	< 1.7	5.9 J	< 1.7	NA	NA
		11/8/2013	< 0.28	6.3	< 2.4	6.7	< 2.4	NA	NA
		9/10/2014	< 0.21	7.6	2.2 B	4.7	1.8 B	10.5	1 J
RW-6	53-64'	5/11/2006	2.9	< 8.0	3.2	< 8.0	< 3.0	NA	NA
		9/27/2006	3.0	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/2/2007	2.6	1.7 B	4.5	< 1.5	2.9 B	NA	NA
	70-81'	5/11/2006	2.6	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
		9/27/2006	2.6	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	1.9	< 1.5	32.3 J	< 1.5	< 2.8	NA	NA

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RW-6	98-120'	10/10/2006	4.0	< 1.5	6.9 J	< 1.5	3.1 J	NA	NA
		4/6/2007	2.7	< 1.5	4.6	< 1.5	< 2.8	NA	NA
		10/11/2007	2.6	2.5 B	< 0.94	1.2 B	1.3 B	NA	NA
		5/2/2008	1.7	3.8	1.5 B	2.5 B	< 1.4	NA	NA
		9/15/2008	2.1	2.4 B	< 1.4	2.1 B	< 1.4	NA	NA
		7/9/2009	2.0	4.1 J	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	1.5	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
		6/4/2010	1.5	NA	NA	NA	NA	NA	NA
		5/18/2011	1.6	< 0.92	1.8 J	< 0.92	2.2 B	NA	NA
		4/27/2012	0.74 J	< 3.0	2.3 J	< 0.97	2.6 J	NA	NA
		11/18/2013	2.3	3.6	4.9	3.2	3.6	NA	NA
		9/5/2014	2.1	2.6 B	1.3 B	< 2.6	< 1.3	NA	NA
		10/9/2014	15.7	3.6	< 1.3	3.3	< 1.3	NA	NA
		3/19/2015	344	NA	NA	NA	NA	NA	NA
		4/22/2015	2.2	NA	NA	NA	NA	NA	NA
		6/2/2015	1.7	NA	NA	NA	NA	NA	NA
RW-6A	58-78'	10/16/2007	5.5	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/2/2008	1.7	2.9 B	2.8 B	< 1.7	1.8 B	NA	NA
		9/15/2008	2.9	1.9 B	< 1.4	1.7 B	< 1.4	NA	NA
		7/9/2009	1.3	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	2.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	1.9	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	1.5	< 0.92	3.1	< 0.92	2.4 B	NA	NA
		4/27/2012	2.0	< 0.97	1.8 J	< 0.97	< 1.7	NA	NA
		11/8/2013	15.0	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	88.1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		10/9/2014	6.8	< 5.1	< 1.3	< 5.1	< 1.3	NA	NA
		3/19/2015	13.3	NA	NA	NA	NA	NA	NA
		4/21/2015	8.7	NA	NA	NA	NA	NA	NA
		4/21/2015	9.1	NA	NA	NA	NA	NA	NA
RW-7	34-45'	5/9/2006	< 0.21	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	40-62'	5/9/2006	< 0.21	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
		9/26/2006	< 0.21	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/5/2008	< 0.26	< 1.7	1.5 B	< 1.7	< 1.4	NA	NA
		9/12/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	5.1	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	0.41 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	5.9	< 0.92	1.1 J	NA	NA
		4/24/2012	< 0.22	1.1 B	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 4.1 B	NA	NA
		9/4/2014	< 0.21	3.6	2.9 B	3.2	< 1.3	NA	NA
		4/20/2015	< 0.24	NA	NA	NA	NA	NA	NA

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RW-7	80-101'	5/10/2006	< 0.21	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	103-120'	5/10/2006	< 0.21	< 8.0	< 3.0	< 8.0	3.8	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	42-62'	7/31/2008	0.62 J	< 1.7	4.0	< 1.7	1.9 B	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/7/2009	< 0.23	< 2.4	17.9	< 2.4	5.0	NA	NA
	158-178'	7/21/2008	< 0.26	4.3	< 1.4	3.2	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	6.0	< 2.4	< 1.7	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	163-173'	6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/24/2010	NA	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	2.1 B	< 1.9	NA	NA	NA	NA
		5/31/2011	< 0.22	2.1 B	< 0.94	1.1 B	< 0.94	NA	NA
		6/1/2011	NA	NA	NA	NA	NA	NA	NA
		5/3/2012	< 0.22	2.0 J	< 1.7	1.7 J	< 1.7	NA	NA
		11/15/2013	0.34 J	2.4 B	< 3.0 B	2.0 B	< 2.4	NA	NA
		9/22/2014	< 0.21	4.2	< 1.3	5.2	< 1.3	NA	NA
		7/22/2008	0.38 J	2.5 B	< 1.4	3.6	< 1.4	NA	NA
	199-219'	7/7/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
	204-214'	6/25/2010	NA	5.9	< 1.9	NA	NA	NA	NA
		6/1/2011	< 0.22	5.1	< 0.94	NA	NA	NA	NA
		11/14/2013	2.2 J	1.5 B	< 2.4	NA	NA	NA	NA
		11/15/2013	NA	NA	NA	< 1.5	< 2.4	NA	NA
		9/23/2014	0.58	3.6	2.3 B	4.2	< 1.3	NA	NA
		7/24/2008	7.0	< 1.7	5.2	< 1.7	2.1 B	NA	NA
RW-9	20-40'	7/15/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/23/2008	0.93 J	1.7 BJ	< 1.4	< 1.7	< 1.4	NA	NA
	80-100'	7/23/2008	1.1	2.1 BJ	< 1.4	2.0 B	< 1.4	NA	NA
		7/15/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/23/2008	0.70 J	< 1.7 J	< 1.4	2.1 BJ	< 1.4	NA	NA
	134-154'	7/16/2009	< 0.23	< 2.4	6.4 J	< 2.4	< 1.7	NA	NA
		7/16/2009	< 0.23	< 2.4	6.4	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/20/2013	< 0.28 J	NA	NA	NA	NA	NA	NA
		7/24/2008	1.5	< 1.7	< 1.4	2.4 B	< 1.4	NA	NA
	201-221'	7/16/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/3/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

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RW-9	206-216'	6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	NA	NA	NA	NA	NA	NA
		6/28/2010	NA	<b>4.6 J</b>	< 1.9	NA	NA	NA	NA
		5/26/2011	< 0.22	NA	NA	NA	NA	NA	NA
		5/27/2011	NA	<b>3.3</b>	< 0.94	NA	NA	NA	NA
		4/20/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/20/2013	< 0.28 J	2.2 B	3.0	< 1.5	< 2.4	NA	NA
		9/25/2014	< 0.21	<b>7.3</b>	< 1.3	<b>8.9</b>	< 1.3	NA	NA
RW-9A	85-95'	6/23/2010	0.33 J	NA	NA	NA	NA	NA	NA
		6/1/2011	< 0.22	NA	NA	NA	NA	NA	NA
		4/20/2012	0.23 J	2.8 J	< 1.7	2.5 J	< 1.7	NA	NA
		11/20/2013	< 0.28 J	<b>3.4</b>	< 2.4	NA	NA	NA	NA
		9/23/2014	< 0.21	<b>5.3</b>	< 1.3	<b>3.7</b>	< 1.3	NA	NA
RW-10	22-42'	7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	2.2 B	< 2.4	< 1.7	NA	NA
	46-66'	7/25/2008	< 0.26	2.2 B	2.8 B	2.2 B	1.6 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	70-90'	7/28/2008	0.26 J	2.4 B	<b>7.3</b>	< 1.7	1.6 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	115-135'	7/28/2008	< 0.26	2.0 B	<b>6.0</b>	< 1.7	1.4 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/24/2010	NA	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	<b>4.3</b>	< 1.9	NA	NA	NA	NA
		5/31/2011	< 0.22	<b>4.8</b>	2.5 B	NA	NA	NA	NA
		6/1/2011	NA	NA	NA	<b>4.1</b>	2.3 B	NA	NA
		4/19/2012	< 0.22	<b>3.7 J</b>	< 1.7	<b>3.6 J</b>	< 1.7	NA	NA
		11/15/2013	< 0.28 J	<b>9.5</b>	5.0 J	<b>8.0</b>	<b>5.1 J</b>	NA	NA
		9/17/2014	< 0.21	<b>8.2</b>	<b>6.3</b>	<b>9.1</b>	< 3.0 B	<b>8.6</b>	<b>8.5</b>
	180-200'	7/29/2008	0.57 J	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/30/2009	< 0.23	< 2.4	<b>6.0</b>	NA	NA	NA	NA
		10/30/2009	< 0.23	< 2.4	<b>7.0</b>	< 2.4	< 1.7	NA	NA
		10/30/2009	NA	NA	NA	< 2.4	< 1.7	NA	NA
		6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	2.2 B	< 1.9	NA	NA	NA	NA
		6/28/2010	NA	NA	NA	< 1.4	< 1.9	NA	NA
		5/31/2011	< 0.22	< 0.92	1.0 B	< 0.92	1.4 B	NA	NA
		4/18/2012	< 0.22	<b>3.6 J</b>	< 1.7	<b>3.6 J</b>	< 1.7	NA	NA
		11/13/2013	< 0.28	<b>7.9</b>	< 4.2 B	<b>6.6</b>	< 3.2 B	NA	NA
		9/17/2014	< 0.21	<b>7.9</b>	3.5	<b>9.7</b>	2.5 B	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**  
**Updated June 2015 (Level 2 Data Validation)**  
**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-10A	51-61'	6/2/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
		4/18/2012	< 0.22	< 3	< 1.7	< 3	< 1.7	NA	NA
		11/15/2013	< 0.28 J	2.1 B	< 3.1 B	NA	NA	NA	NA
		9/18/2014	< 0.21	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	75-85'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/28/2010	NA	< 1.4	4.0 J	< 1.4	< 1.9	NA	NA
		6/2/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		5/7/2012	NA	NA	NA	NA	NA	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/18/2014	< 0.21	< 2.6	3.0	< 2.6	< 3.0 B	NA	NA
		6/7/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/26/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
RW-11	142-167'	6/7/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/26/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
	221-246'	6/8/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
	252-272'	6/8/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 3.0	< 0.92	1.7 J	NA	NA
	RW-11D	5/1/2012	< 0.22	NA	NA	NA	NA	NA	NA
		11/14/2013	0.56 J	< 1.5	3.3	< 1.5	< 2.4	NA	NA
		9/15/2014	2.0	< 3.0 B	< 1.3	< 2.6	< 1.3	NA	NA
RW-11S	236-241'	5/1/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/12/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/12/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
RW-12	50-70'	5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/19/2014	< 0.21	< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
	96-116'	5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
RW-13	125-148'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/19/2014	< 0.21	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	71-91'	9/9/2014	< 0.21	<b>6.3</b>	3.7	<b>4.9</b>	3.7	NA	NA
	100-120'	9/16/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	150-170'	9/16/2014	< 0.21	< 2.6	1.7 B	2.9 B	< 1.3	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**  
**Updated June 2015 (Level 2 Data Validation)**  
**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
SC-01	64.4-70.9'	10/5/2006	< 0.21	< 1.5	< 2.6	1.7 B	< 2.6	NA	NA
		4/11/2007	1.4	< 1.5	<b>6.3</b>	< 1.5	< 2.8	NA	NA
		10/16/2007	1.5	< 1.1	<b>8.8</b>	< 1.1	1.6 B	NA	NA
		4/30/2008	0.93 J	< 1.7	<b>6.6</b>	< 1.7	1.9 B	NA	NA
		4/30/2008	1.1	< 1.7	<b>5.4</b>	< 1.7	< 1.4	NA	NA
		9/17/2008	0.81 J	< 1.7	<b>6.2</b>	< 1.7	< 1.4	NA	NA
		7/9/2009	0.94 J	< 2.4	<b>7.2 J</b>	< 2.4	< 3.0	NA	NA
		10/28/2009	0.53 J	< 2.4	<b>9.9</b>	< 2.4	< 1.7	NA	NA
		6/2/2010	1.5	< 1.4	<b>6.2</b>	< 1.4	< 1.9	NA	NA
		5/18/2011	0.63 J	< 0.92	<b>5.6</b>	< 0.92	1.5 J	NA	NA
		4/27/2012	1.2	< 0.97	<b>9.4</b>	< 0.97	< 1.7	NA	NA
		11/11/2013	1.6	< 1.5	<b>8.6</b>	< 1.5	< 2.4	NA	NA
		9/5/2014	56.0	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		10/9/2014	1.6	< 2.6	<b>2.5 B</b>	< 2.6	< 1.3	NA	NA
		3/19/2015	150	NA	NA	NA	NA	NA	NA
		4/22/2015	1.8	NA	NA	NA	NA	NA	NA
		6/2/2015	1.6	NA	NA	NA	NA	NA	NA
SC-02	47-67'	5/5/2008	< 0.26	< 1.7	<b>2.8 B</b>	< 1.7	< 1.4	NA	NA
		9/17/2008	< 0.26	2.1 B	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/16/2011	< 0.26	1.4 B	<b>20.0</b>	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	<b>2.9 J</b>	< 0.97	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	<b>&lt; 4.0 B</b>	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 3.0 B	< 1.3	<b>3.1 J</b>	< 1.3	NA	NA

**Notes:**

Results for benzene, lead, and arsenic are presented in this table. Results for all contaminants are presented in Appendix F.

Results are presented in µg/L unless otherwise noted.

<sup>1</sup> GWQS, Class IIA, as specified in New Jersey Administrative Code 7:9-6, current 2005 and interim criteria,

Bold values indicate value is above the GWQS.

Shaded values indicate value is above the USEPA MCL.

Bold and shaded values indicate value is above the GWQS and the USEPA MCL.

Italicized values indicate detection limit is above the GWQS standard.

< = not detected

B (inorganic) = estimated result is between the detection limit and quantification limit

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

GWQS = Groundwater Quality Standard

J = estimated result

MCL = maximum concentration limit

NA = not analyzed or not available

NS = no standard

R = rejected result

µg/L = micrograms per liter

USEPA = United States Environmental Protection Agency

## ANALYTICAL REPORT

Job Number: 490-79645-1

Job Description: FORD Ringwood Mines E203361

For:

Cornerstone Environmental Group, LLC  
100 Crystal Run Road  
Suite 101  
Middletown, NY 10941

Attention: Tim Roeper



Approved for release.  
Shali Brown  
Project Manager II  
6/11/2015 6:52 PM

---

Shali Brown, Project Manager II  
2960 Foster Creighton Drive, Nashville, TN, 37204  
(615)301-5031  
shali.brown@testamericainc.com  
06/11/2015

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# DATA KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

**Laboratory Name:** TestAmerica Nashville      **Client:** Cornerstone Eng.  
**Project Location:** Ringwood, NJ      **Project Number:** Project Manager  
**Laboratory Sample ID (s):** 490-79645-1 to 9 and 490-79781-1 to 10      **Sampling Date (s):** 6-1, 6-2, 6-3 2015  
**List DKQP Methods Used:** 8260C

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
1A	Were the method specified handling, preservation and holding time requirements met?	<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
1B	<i>EPH Method:</i> Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<b>Yes</b> <input type="checkbox"/>  <b>N/A</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
3	Were samples received at an appropriate temperature ( $4\pm2^{\circ}\text{C}$ )?	<b>Yes</b> <input checked="" type="checkbox"/>  <b>N/A</b> <input type="checkbox"/>	<b>No</b> <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved? <b>(See Case Narrative)</b>	<b>Yes</b> <input type="checkbox"/>	<b>No</b> <input checked="" type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of custody or communicated to the laboratory prior to sample receipt?  b) Were these reporting limits met? <b>(See Case Narrative)</b>	<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>
		<b>Yes</b> <input type="checkbox"/>  <b>N/A</b> <input type="checkbox"/>	<b>No</b> <input checked="" type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP? <b>(See Case Narrative)</b>	<b>Yes</b> <input type="checkbox"/>	<b>No</b> <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<b>Yes</b> <input checked="" type="checkbox"/>	<b>No</b> <input type="checkbox"/>

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in a attached narrative. If the answer to question #1, 1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

## CASE NARRATIVE

**Client: Cornerstone Environmental Group, LLC**

**Project: FORD Ringwood Mines E203361**

**Report Number: 490-79645-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

### **DKQP Summary Questionnaire Comments:**

4 - Reference comments below for Bromomethane RPD outside of limits on MSD's.

5b- The following four compounds have higher reporting limits than those referenced by the client: carbon disulfide; 1,2-Dibromo-3-chloropropane; methyl acetate; methylene chloride. At client request the laboratory provided lists of current MDL's and RL's to be used in the QAPP.

6 - As compared to SOM01.2 the following compounds were not reported because they were not listed in the client specified list of compounds: Bromochloromethane; 1,4 Dioxane; 1,2,3 - Trichlorobenzene; and individual Xylenes O-xylene and m,p-xylene.

### **RECEIPT**

The samples were received on 06/03/2015 and 06/04/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0 and 2.6 C.

### **VOLATILE ORGANIC COMPOUNDS (GC/MS)**

Samples OB-20A-060115 (490-79645-1), SC-01-060215 (490-79781-1), FB-01-060115 (490-79645-2), PMP-Pond-060215 (490-79781-2), OB-20B-060115 (490-79645-3), RW-6-060215 (490-79781-3), DUP-01-060115 (490-79645-4), PMP-50-060215 (490-79781-4), OB-27-060115 (490-79645-5), PAB-00-060215 (490-79781-5), OB-11R-060115 (490-79645-6), PAB-01-060215 (490-79781-6), SR-3-SEEP-060115 (490-79645-7), PAB-02-060215 (490-79781-7), RW-6A-060115 (490-79645-8), PMP-180-060315 (490-79781-8), Trip Blank (490-79645-9), PMP-230-060315 (490-79781-9) and Trip Blank (490-79781-10) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 06/05/2015, 06/06/2015 and 06/08/2015.

4-Bromomethane exceeded the RPD limit for the MSD of sample 490-79558-2 in batch 490-254379. The individual analytes recoveries however did pass criteria. See QC report for details.

4-Bromomethane exceeded the RPD limit for the MSD of sample SC-01-060215MSD (490-79781-1) in batch 490-253850. The individual analytes recoveries however did pass criteria. See QC report for details.

TICs: The J qualifier on the TICs have the following definition: "Indicates an estimated Value for TICs"

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



## SAMPLE SUMMARY

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
490-79645-1	OB-20A-060115	Ground Water	06/01/2015 1050	06/03/2015 0840
490-79645-1MS	OB-20A-060115	Ground Water	06/01/2015 1050	06/03/2015 0840
490-79645-1MSD	OB-20A-060115	Ground Water	06/01/2015 1050	06/03/2015 0840
490-79645-2FB	FB-01-060115	Water	06/01/2015 1120	06/03/2015 0840
490-79645-3	OB-20B-060115	Ground Water	06/01/2015 1220	06/03/2015 0840
490-79645-4FD	DUP-01-060115	Ground Water	06/01/2015 0000	06/03/2015 0840
490-79645-5	OB-27-060115	Ground Water	06/01/2015 1345	06/03/2015 0840
490-79645-6	OB-11R-060115	Ground Water	06/01/2015 1455	06/03/2015 0840
490-79645-7	SR-3-SEEP-060115	Ground Water	06/01/2015 1405	06/03/2015 0840
490-79645-8	RW-6A-060115	Ground Water	06/01/2015 1550	06/03/2015 0840
490-79645-9TB	Trip Blank	Water	06/01/2015 0000	06/03/2015 0840
490-79781-1	SC-01-060215	Ground Water	06/02/2015 0945	06/04/2015 0840
490-79781-2	PMP-Pond-060215	Surface Water	06/02/2015 0900	06/04/2015 0840
490-79781-3	RW-6-060215	Ground Water	06/02/2015 1050	06/04/2015 0840
490-79781-4	PMP-50-060215	Ground Water	06/02/2015 1305	06/04/2015 0840
490-79781-5	PAB-00-060215	Surface Water	06/02/2015 1545	06/04/2015 0840
490-79781-6	PAB-01-060215	Surface Water	06/02/2015 1610	06/04/2015 0840
490-79781-7	PAB-02-060215	Surface Water	06/02/2015 1620	06/04/2015 0840
490-79781-8	PMP-180-060315	Ground Water	06/03/2015 0930	06/04/2015 0840
490-79781-9	PMP-230-060315	Ground Water	06/03/2015 1045	06/04/2015 0840
490-79781-10TB	Trip Blank	Water	06/02/2015 0001	06/04/2015 0840

## EXECUTIVE SUMMARY - Detections

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>490-79645-2FB</b> Methylene Chloride	<b>FB-01-060115</b>	1.6	J	3.0	ug/L	8260C
<b>490-79645-3</b> Benzene	<b>OB-20B-060115</b>	0.27	J	0.50	ug/L	8260C
Chloroethane		1.7		0.50	ug/L	8260C
Cyclohexane		0.96	J	1.0	ug/L	8260C
Methylcyclohexane		0.50		0.50	ug/L	8260C
<b>490-79645-4FD</b> Benzene	<b>DUP-01-060115</b>	0.27	J	0.50	ug/L	8260C
Chloroethane		1.9		0.50	ug/L	8260C
Cyclohexane		0.91	J	1.0	ug/L	8260C
Methylcyclohexane		0.44	J	0.50	ug/L	8260C
Toluene		0.19	J	0.50	ug/L	8260C
<b>490-79645-5</b> Benzene	<b>OB-27-060115</b>	3.0		0.50	ug/L	8260C
Chloroethane		79		0.50	ug/L	8260C
cis-1,2-Dichloroethene		0.30	J	0.50	ug/L	8260C
Cyclohexane		1.6		1.0	ug/L	8260C
1,1-Dichloroethane		0.25	J	0.50	ug/L	8260C
1,2-Dichloroethane		0.22	J	0.50	ug/L	8260C
Isopropylbenzene		2.7		1.0	ug/L	8260C
Methylcyclohexane		0.89		0.50	ug/L	8260C
<b>490-79645-6</b> Benzene	<b>OB-11R-060115</b>	2.9		0.50	ug/L	8260C
Chloroethane		22		0.50	ug/L	8260C
cis-1,2-Dichloroethene		0.31	J	0.50	ug/L	8260C
Cyclohexane		1.9		1.0	ug/L	8260C
1,1-Dichloroethane		0.24	J	0.50	ug/L	8260C
Isopropylbenzene		0.53	J	1.0	ug/L	8260C
Methylcyclohexane		0.41	J	0.50	ug/L	8260C
<b>490-79645-7</b> Acetone	<b>SR-3-SEEP-060115</b>	4.5	J	5.0	ug/L	8260C

## EXECUTIVE SUMMARY - Detections

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>490-79645-8</b>	<b>RW-6A-060115</b>					
Benzene		9.1		0.50	ug/L	8260C
Chloroethane		1.8		0.50	ug/L	8260C
Cyclohexane		2.7		1.0	ug/L	8260C
1,4-Dichlorobenzene		0.18	J	0.50	ug/L	8260C
1,1-Dichloroethane		0.28	J	0.50	ug/L	8260C
Isopropylbenzene		4.6		1.0	ug/L	8260C
Methylcyclohexane		0.72		0.50	ug/L	8260C
Toluene		0.61		0.50	ug/L	8260C
<b>490-79781-1</b>	<b>SC-01-060215</b>					
Benzene		1.6		0.50	ug/L	8260C
Chlorobenzene		0.27	J	0.50	ug/L	8260C
Chloroethane		1.1		0.50	ug/L	8260C
Cyclohexane		1.7		1.0	ug/L	8260C
Dichlorodifluoromethane		0.70		0.50	ug/L	8260C
Ethylbenzene		0.76		0.50	ug/L	8260C
Isopropylbenzene		1.3		1.0	ug/L	8260C
Methylcyclohexane		1.2		0.50	ug/L	8260C
Toluene		0.76		0.50	ug/L	8260C
Xylenes, Total		48		1.0	ug/L	8260C
<b>490-79781-3</b>	<b>RW-6-060215</b>					
Benzene		1.7		0.50	ug/L	8260C
Chloroethane		1.4		0.50	ug/L	8260C
Cyclohexane		0.14	J	1.0	ug/L	8260C
1,1-Dichloroethane		0.34	J	0.50	ug/L	8260C
Toluene		0.37	J	0.50	ug/L	8260C
<b>490-79781-8</b>	<b>PMP-180-060315</b>					
Benzene		5.4		0.50	ug/L	8260C
Chlorobenzene		1.2		0.50	ug/L	8260C
Chloroethane		14		0.50	ug/L	8260C
cis-1,2-Dichloroethene		0.38	J	0.50	ug/L	8260C
Cyclohexane		0.76	J	1.0	ug/L	8260C
1,4-Dichlorobenzene		0.44	J	0.50	ug/L	8260C
1,1-Dichloroethane		0.39	J	0.50	ug/L	8260C
Isopropylbenzene		0.81	J	1.0	ug/L	8260C
Methylcyclohexane		0.20	J	0.50	ug/L	8260C
Toluene		140		0.50	ug/L	8260C
Vinyl chloride		0.19	J	0.50	ug/L	8260C

## EXECUTIVE SUMMARY - Detections

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>490-79781-9</b>	<b>PMP-230-060315</b>					
Benzene		25		0.50	ug/L	8260C
Chlorobenzene		13		0.50	ug/L	8260C
Chloroethane		8.0		0.50	ug/L	8260C
Cyclohexane		1.4		1.0	ug/L	8260C
1,2-Dichlorobenzene		0.38	J	0.50	ug/L	8260C
1,3-Dichlorobenzene		0.92		0.50	ug/L	8260C
1,4-Dichlorobenzene		2.8		0.50	ug/L	8260C
Isopropylbenzene		4.9		1.0	ug/L	8260C
Methylcyclohexane		0.23	J	0.50	ug/L	8260C
Toluene		80		0.50	ug/L	8260C
Xylenes, Total		0.61	J	1.0	ug/L	8260C
<b>490-79781-10TB</b>	<b>TRIP BLANK</b>					
Acetone		3.3	J	5.0	ug/L	8260C

## METHOD SUMMARY

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Ground Water</b>			
Volatile Organic Compounds by GC/MS Purge and Trap	TAL NSH TAL NSH	SW846 8260C SW846 5030C	
<b>Matrix: Surface Water</b>			
Volatile Organic Compounds by GC/MS Purge and Trap	TAL NSH TAL NSH	SW846 8260C SW846 5030C	
<b>Matrix: Water</b>			
Volatile Organic Compounds by GC/MS Purge and Trap	TAL NSH TAL NSH	SW846 8260C SW846 5030C	

### Lab References:

TAL NSH = TestAmerica Nashville

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Method	Analyst	Analyst ID
SW846 8260C	Larsen, Eric	EML

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-20A-060115

Lab Sample ID: 490-79645-1  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1050  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-37.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0347			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0347				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-20A-060115

Lab Sample ID: 490-79645-1 Date Sampled: 06/01/2015 1050  
Client Matrix: Ground Water Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-37.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0347			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0347				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	%Rec	Qualifier	Acceptance Limits	
Dibromofluoromethane (Surr)	111		70 - 130	
Toluene-d8 (Surr)	94		70 - 130	
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	
	98		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-20A-060115

Lab Sample ID: 490-79645-1 Date Sampled: 06/01/2015 1050  
Client Matrix: Ground Water Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-37.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0347			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0347				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: FB-01-060115

Lab Sample ID: 490-79645-2FB  
Client Matrix: Water

Date Sampled: 06/01/2015 1120  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-42.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0607			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0607				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	1.6	J	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** FB-01-060115

Lab Sample ID: 490-79645-2FB  
Client Matrix: Water

Date Sampled: 06/01/2015 1120  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-42.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0607			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0607				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	113		70 - 130	
Dibromofluoromethane (Surr)	99		70 - 130	
Toluene-d8 (Surr)	105		70 - 130	
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** FB-01-060115

Lab Sample ID: 490-79645-2FB  
Client Matrix: Water

Date Sampled: 06/01/2015 1120  
Date Received: 06/03/2015 0840

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-42.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0607			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0607				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: OB-20B-060115

Lab Sample ID: 490-79645-3  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1220  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-43.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0635			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0635				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.27	J	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	1.7		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.96	J	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.50		0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-20B-060115

Lab Sample ID: 490-79645-3  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1220  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-43.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0635			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0635				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	112	Qualifier		Acceptance Limits
Dibromofluoromethane (Surr)	97			70 - 130
Toluene-d8 (Surr)	104			70 - 130
1,2-Dichloroethane-d4 (Surr)	97			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-20B-060115

Lab Sample ID: 490-79645-3  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1220  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-43.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0635			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0635				

#### Tentatively Identified Compounds      Number TIC's Found: 5

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	1.6	J
110-54-3	Hexane	2.35	0.16	J
496-11-7	Indane	8.09	4.9	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.94	2.7	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.39	3.6	J N
91-20-3	Naphthalene	10.12	1.7	J

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** DUP-01-060115

Lab Sample ID: 490-79645-4FD  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-44.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0703			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0703				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.27	J	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	1.9		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.91	J	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.44	J	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.19	J	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** DUP-01-060115

Lab Sample ID: 490-79645-4FD  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-44.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0703			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0703				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
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Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	112		70 - 130	
Dibromofluoromethane (Surr)	96		70 - 130	
Toluene-d8 (Surr)	105		70 - 130	
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** DUP-01-060115

Lab Sample ID: 490-79645-4FD  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-44.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0703			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0703				

#### Tentatively Identified Compounds      Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	1.4	J
110-54-3	Hexane	2.34	0.16	J
26146-77-0	trans-Cinnamyl bromide	8.09	4.7	J N
3454-07-7	Benzene, 1-ethenyl-4-ethyl-	9.39	3.3	J N
91-20-3	Naphthalene	10.11	1.7	J

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-27-060115

Lab Sample ID: 490-79645-5  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1345  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-45.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0730			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0730				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	3.0		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	79		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.30	J	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	1.6		0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.25	J	0.24	0.50
1,2-Dichloroethane	0.22	J	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	2.7		0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.89		0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-27-060115

Lab Sample ID: 490-79645-5 Date Sampled: 06/01/2015 1345  
Client Matrix: Ground Water Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-45.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0730			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0730				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130
Toluene-d8 (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-27-060115

Lab Sample ID: 490-79645-5 Date Sampled: 06/01/2015 1345  
Client Matrix: Ground Water Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-45.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0730			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0730				

#### Tentatively Identified Compounds      Number TIC's Found: 14

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	2.5	J
26146-77-0	trans-Cinnamyl bromide	8.08	12	J N
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	8.55	10	J N
767-58-8	Indan, 1-methyl-	8.64	8.2	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.93	12	J N
3454-07-7	Benzene, 1-ethenyl-4-ethyl-	9.23	5.5	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.38	21	J N
4489-84-3	Benzene, (3-methyl-2-butenyl)-	9.73	5.9	J N
4706-89-2	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	9.79	7.6	J N
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethyl-	9.86	5.0	J N
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl-	9.90	7.9	J N
91-20-3	Naphthalene	10.08	5.7	
1685-82-1	1H-Indene, 2,3-dihydro-4,6-dimethyl-	10.78	7.2	J N
21564-91-0	Naphthalene, 1,2,3,4-tetrahydro-1,5-dime	11.02	6.3	J N
25419-33-4	Naphthalene, 1,2,3,4-tetrahydro-1,8-dime	11.44	4.8	J N

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: OB-11R-060115

Lab Sample ID: 490-79645-6  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1455  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-46.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0758			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0758				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	2.9		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	22		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.31	J	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	1.9		0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	J	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.53	J	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.41	J	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** OB-11R-060115

Lab Sample ID: 490-79645-6  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1455  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-46.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0758			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0758				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	114	%Rec		Acceptance Limits
Dibromofluoromethane (Surr)	97			70 - 130
Toluene-d8 (Surr)	104			70 - 130
1,2-Dichloroethane-d4 (Surr)	98			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID: OB-11R-060115**

Lab Sample ID: 490-79645-6 Date Sampled: 06/01/2015 1455  
Client Matrix: Ground Water Date Received: 06/03/2015 0840

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**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-46.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0758			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0758				

**Tentatively Identified Compounds      Number TIC's Found: 9**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	6.4	J
110-54-3	Hexane	2.34	0.21	J
96-37-7	Cyclopentane, methyl-	2.69	3.9	J N
26146-77-0	trans-Cinnamyl bromide	8.09	3.5	J N
767-58-8	Indan, 1-methyl-	8.64	3.0	J N
527-53-7	Benzene, 1,2,3,5-tetramethyl-	8.93	3.4	J N
1560-06-1	Benzene, 2-butenyl-	9.39	5.2	J N
4489-84-3	Benzene, (3-methyl-2-butenyl)-	9.80	2.6	J N
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl-	9.90	3.9	J N
6682-06-0	1H-Indene, 2,3-dihydro-4,5,7-trimethyl-	11.02	2.5	J N

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: SR-3-SEEP-060115

Lab Sample ID: 490-79645-7  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1405  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1937			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.5	J	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** SR-3-SEEP-060115

Lab Sample ID: 490-79645-7  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1405  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1937			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1937				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	113	Qualifier		Acceptance Limits
Dibromofluoromethane (Surr)	97			70 - 130
Toluene-d8 (Surr)	107			70 - 130
1,2-Dichloroethane-d4 (Surr)	93			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** SR-3-SEEP-060115

Lab Sample ID: 490-79645-7  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1405  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1937			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1937				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: RW-6A-060115

Lab Sample ID: 490-79645-8  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1550  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2005			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2005				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	9.1		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	1.8		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	2.7		0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.18	J	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.28	J	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	4.6		0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.72		0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.61		0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** RW-6A-060115

Lab Sample ID: 490-79645-8  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1550  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2005			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2005				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	113			70 - 130
Dibromofluoromethane (Surr)	97			70 - 130
Toluene-d8 (Surr)	106			70 - 130
1,2-Dichloroethane-d4 (Surr)	95			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** RW-6A-060115

Lab Sample ID: 490-79645-8  
Client Matrix: Ground Water

Date Sampled: 06/01/2015 1550  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2005			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2005				

#### Tentatively Identified Compounds      Number TIC's Found: 14

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	12	J
96-37-7	Cyclopentane, methyl-	2.68	8.1	J N
103-65-1	N-Propylbenzene	7.00	4.7	
108-67-8	1,3,5-Trimethylbenzene	7.16	1.4	
526-73-8	Benzene, 1,2,3-trimethyl-	7.90	20	J N
4439-45-6	Benzene, 1,1'-(1,5-hexadiene-1,6-diy)bi	8.08	17	J N
1074-55-1	Benzene, 1-methyl-4-propyl-	8.36	2.6	J N
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	8.55	13	J N
767-58-8	Indan, 1-methyl-	8.64	5.7	J N
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	8.84	3.8	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.93	11	J N
527-53-7	Benzene, 1,2,3,5-tetramethyl-	8.98	4.6	J N
934-10-1	3-Phenylbut-1-ene	9.23	4.2	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.38	15	J N
91-20-3	Naphthalene	10.08	7.9	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-79645-9TB  
Client Matrix: Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-36.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0319			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0319				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** Trip Blank

Lab Sample ID: 490-79645-9TB  
Client Matrix: Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

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**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-36.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0319			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0319				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	113		70 - 130	
Dibromofluoromethane (Surr)	98		70 - 130	
Toluene-d8 (Surr)	107		70 - 130	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** Trip Blank

Lab Sample ID: 490-79645-9TB  
Client Matrix: Water

Date Sampled: 06/01/2015 0000  
Date Received: 06/03/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254074	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-36.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0319			Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0319				

#### Tentatively Identified Compounds      Number TIC's Found: 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC		None	
67-63-0	Isopropyl alcohol	1.92	50	
75-65-0	2-Methyl-2-propanol	2.12	6.8	J

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: SC-01-060215

Lab Sample ID: 490-79781-1  
Client Matrix: Ground Water

Date Sampled: 06/02/2015 0945  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-12.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1604			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1604				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	1.6		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U F2	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.27	J	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	1.1		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	1.7		0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.70		0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.76		0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	1.3		0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	1.2		0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.76		0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** SC-01-060215

Lab Sample ID: 490-79781-1 Date Sampled: 06/02/2015 0945  
Client Matrix: Ground Water Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-12.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1604			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1604				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	48		0.58	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	105		70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** SC-01-060215

Lab Sample ID: 490-79781-1 Date Sampled: 06/02/2015 0945  
Client Matrix: Ground Water Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-12.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1604			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1604				

#### Tentatively Identified Compounds      Number TIC's Found: 15

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	6.2	J
123-73-9	2-Butenal, (E)-	0.98	55	J N
110-54-3	Hexane	2.34	0.33	J
96-37-7	Cyclopentane, methyl-	2.68	3.0	J N
95-47-6	o-Xylene	6.29	2.4	
103-65-1	N-Propylbenzene	7.01	0.49	J
108-67-8	1,3,5-Trimethylbenzene	7.17	1.0	
95-63-6	1,2,4-Trimethylbenzene	7.51	4.6	
36617-02-4	Benzene, (2-bromocyclopropyl)-	8.09	4.1	J N
104-51-8	n-Butylbenzene	8.21	0.62	
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	8.48	2.9	J N
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	8.55	5.7	J N
488-23-3	Benzene, 1,2,3,4-tetramethyl-	8.93	3.7	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.98	7.3	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.39	6.5	J N
91-20-3	Naphthalene	10.08	4.9	J

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: PMP-Pond-060215

Lab Sample ID: 490-79781-2  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 0900  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-16.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1757			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1757				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-Pond-060215

Lab Sample ID: 490-79781-2  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 0900  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-16.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1757			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1757				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
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Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	107		70 - 130	
Dibromofluoromethane (Surr)	111		70 - 130	
Toluene-d8 (Surr)	114		70 - 130	
1,2-Dichloroethane-d4 (Surr)	111		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-Pond-060215

Lab Sample ID: 490-79781-2  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 0900  
Date Received: 06/04/2015 0840

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-16.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1757			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1757				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: RW-6-060215

Lab Sample ID: 490-79781-3  
Client Matrix: Ground Water

Date Sampled: 06/02/2015 1050  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-17.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1825			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1825				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	1.7		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	1.4		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.14	J	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.34	J	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.37	J	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** RW-6-060215

Lab Sample ID: 490-79781-3  
Client Matrix: Ground Water

Date Sampled: 06/02/2015 1050  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-17.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1825			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1825				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	113	Qualifier		Acceptance Limits
Dibromofluoromethane (Surr)	99			70 - 130
Toluene-d8 (Surr)	117			70 - 130
1,2-Dichloroethane-d4 (Surr)	98			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** RW-6-060215

Lab Sample ID: 490-79781-3

Date Sampled: 06/02/2015 1050

Client Matrix: Ground Water

Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-17.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1825			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1825				

#### Tentatively Identified Compounds

Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC	0.00	0.14	J

# Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-50-060215Lab Sample ID: 490-79781-4  
Client Matrix: Ground WaterDate Sampled: 06/02/2015 1305  
Date Received: 06/04/2015 0840**8260C Volatile Organic Compounds by GC/MS**

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-18.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1853			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1853				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-50-060215

Lab Sample ID: 490-79781-4  
Client Matrix: Ground Water

Date Sampled: 06/02/2015 1305  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-18.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1853			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1853				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
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Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	108		70 - 130	
Dibromofluoromethane (Surr)	104		70 - 130	
Toluene-d8 (Surr)	114		70 - 130	
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-50-060215

Lab Sample ID: 490-79781-4  
Client Matrix: Ground Water

Date Sampled: 06/02/2015 1305  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-18.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1853			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1853				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: PAB-00-060215

Lab Sample ID: 490-79781-5  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1545  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-19.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1921			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1921				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-00-060215

Lab Sample ID: 490-79781-5 Date Sampled: 06/02/2015 1545  
Client Matrix: Surface Water Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-19.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1921			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1921				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	120		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-00-060215

Lab Sample ID: 490-79781-5  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1545  
Date Received: 06/04/2015 0840

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-19.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1921			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1921				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-01-060215

Lab Sample ID: 490-79781-6  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1610  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-20.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1949			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1949				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-01-060215

Lab Sample ID: 490-79781-6  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1610  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-20.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1949			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1949				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
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Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	105		70 - 130	
Dibromofluoromethane (Surr)	102		70 - 130	
Toluene-d8 (Surr)	115		70 - 130	
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-01-060215

Lab Sample ID: 490-79781-6  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1610  
Date Received: 06/04/2015 0840

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-20.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1949			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1949				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: PAB-02-060215

Lab Sample ID: 490-79781-7  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1620  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2018			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-02-060215

Lab Sample ID: 490-79781-7 Date Sampled: 06/02/2015 1620  
Client Matrix: Surface Water Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2018			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2018				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	106	%Rec		Acceptance Limits
Dibromofluoromethane (Surr)	101			70 - 130
Toluene-d8 (Surr)	112			70 - 130
1,2-Dichloroethane-d4 (Surr)	104			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PAB-02-060215

Lab Sample ID: 490-79781-7  
Client Matrix: Surface Water

Date Sampled: 06/02/2015 1620  
Date Received: 06/04/2015 0840

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### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-21.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2018			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2018				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: PMP-180-060315

Lab Sample ID: 490-79781-8  
Client Matrix: Ground Water

Date Sampled: 06/03/2015 0930  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2046			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2046				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	5.4		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	1.2		0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	14		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.38	J	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.76	J	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.44	J	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.39	J	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.81	J	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.20	J	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	140		0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-180-060315

Lab Sample ID: 490-79781-8  
Client Matrix: Ground Water

Date Sampled: 06/03/2015 0930  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2046			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2046				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.19	J	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate				
4-Bromofluorobenzene (Surr)	109			70 - 130
Dibromofluoromethane (Surr)	98			70 - 130
Toluene-d8 (Surr)	115			70 - 130
1,2-Dichloroethane-d4 (Surr)	99			70 - 130

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-180-060315

Lab Sample ID: 490-79781-8  
Client Matrix: Ground Water

Date Sampled: 06/03/2015 0930  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-22.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2046			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2046				

#### Tentatively Identified Compounds      Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	1.2	J
75-43-4	Dichlorofluoromethane	1.53	0.28	J
110-54-3	Hexane	2.34	0.21	J
36617-02-4	Benzene, (2-bromocyclopropyl)-	8.09	2.7	J N

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: PMP-230-060315

Lab Sample ID: 490-79781-9  
Client Matrix: Ground Water

Date Sampled: 06/03/2015 1045  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-23.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2115			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2115				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	25		0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	13		0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	8.0		0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	1.4		0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.38	J	0.19	0.50
1,3-Dichlorobenzene	0.92		0.18	0.50
1,4-Dichlorobenzene	2.8		0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	4.9		0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.23	J	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	80		0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-230-060315

Lab Sample ID: 490-79781-9 Date Sampled: 06/03/2015 1045  
Client Matrix: Ground Water Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-23.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2115			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2115				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.61	J	0.58	1.0
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	112		70 - 130	
Dibromofluoromethane (Surr)	102		70 - 130	
Toluene-d8 (Surr)	111		70 - 130	
1,2-Dichloroethane-d4 (Surr)	108		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** PMP-230-060315

Lab Sample ID: 490-79781-9  
Client Matrix: Ground Water

Date Sampled: 06/03/2015 1045  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-23.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2115			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2115				

#### Tentatively Identified Compounds      Number TIC's Found: 8

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Total Alkanes TIC	0.00	1.8	J
60-29-7	Ethyl ether	1.70	0.93	J
110-54-3	Hexane	2.35	0.21	J
109-99-9	Tetrahydrofuran	2.94	3.5	J
80-62-6	Methyl methacrylate	3.95	0.68	J
123-91-1	1,4-Dioxane	3.97	150	J
103-65-1	N-Propylbenzene	7.01	0.62	
135-01-3	Benzene, 1,2-diethyl-	8.09	3.3	J N
91-20-3	Naphthalene	10.10	2.9	J

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-79781-10TB  
Client Matrix: Water

Date Sampled: 06/02/2015 0001  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-11.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1535			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1535				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50
Freon-113	0.15	U	0.15	1.0
Vinyl chloride	0.18	U	0.18	0.50

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** Trip Blank

Lab Sample ID: 490-79781-10TB  
Client Matrix: Water

Date Sampled: 06/02/2015 0001  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-11.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1535			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1535				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Xylenes, Total	0.58	U	0.58	1.0
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	114		70 - 130	
Dibromofluoromethane (Surr)	102		70 - 130	
Toluene-d8 (Surr)	113		70 - 130	
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** Trip Blank

Lab Sample ID: 490-79781-10TB  
Client Matrix: Water

Date Sampled: 06/02/2015 0001  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-253850	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060515-11.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1535			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1535				

#### Tentatively Identified Compounds      Number TIC's Found: 0

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

## Analytical Data

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Client Sample ID:** Trip Blank

Lab Sample ID: 490-79781-10TB  
Client Matrix: Water

Date Sampled: 06/02/2015 0001  
Date Received: 06/04/2015 0840

### 8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	490-254379	Instrument ID:	HP32
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	060815-19.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1842			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1842				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.3	J	2.7	5.0
<hr/>				
Surrogate	%Rec	Qualifier	Acceptance Limits	
4-Bromofluorobenzene (Surr)	110		70 - 130	
Dibromofluoromethane (Surr)	98		70 - 130	
Toluene-d8 (Surr)	104		70 - 130	
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	

**Quality Control Results**

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Surrogate Recovery Report****8260C Volatile Organic Compounds by GC/MS****Client Matrix: Water**

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
490-79645-1	OB-20A-060115	94	98	103	111
490-79645-2	FB-01-060115	99	97	105	113
490-79645-3	OB-20B-060115	97	97	104	112
490-79645-4	DUP-01-060115	96	98	105	112
490-79645-5	OB-27-060115	95	97	105	114
490-79645-6	OB-11R-060115	97	98	104	114
490-79645-7	SR-3-SEEP-060115	97	93	107	113
490-79645-8	RW-6A-060115	97	95	106	113
490-79645-9	Trip Blank	98	101	107	113
490-79781-1	SC-01-060215	102	105	107	104
490-79781-2	PMP-Pond-060215	111	111	114	107
490-79781-3	RW-6-060215	99	98	117	113
490-79781-4	PMP-50-060215	104	105	114	108
490-79781-5	PAB-00-060215	100	103	120	108
490-79781-6	PAB-01-060215	102	105	115	105
490-79781-7	PAB-02-060215	101	104	112	106
490-79781-8	PMP-180-060315	98	99	115	109
490-79781-9	PMP-230-060315	102	108	111	112
490-79781-10	Trip Blank	102	105	113	114
490-79781-10	Trip Blank	98	96	104	110
MB 490-253850/7		99	100	106	109
MB 490-254074/7		96	97	110	111
MB 490-254379/7		98	98	100	116
LCS 490-253850/3		103	101	105	107
LCS 490-254074/3		96	96	106	112
LCS 490-254379/3		95	94	97	119
LCSD 490-253850/4		100	100	104	108
LCSD 490-254074/4		98	97	100	116
LCSD 490-254379/4		94	95	95	119

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene (Surr)	70-130

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Surrogate Recovery Report

#### 8260C Volatile Organic Compounds by GC/MS

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
490-79645-1 MS	OB-20A-060115 MS	95	95	96	117
490-79781-1 MS	SC-01-060215 MS	96	94	101	110
490-79558-B-2 MS		95	93	96	118
490-79645-1 MSD	OB-20A-060115 MSD	94	94	96	118
490-79781-1 MSD	SC-01-060215 MSD	97	97	103	111
490-79558-C-2 MSD		95	94	95	119

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene (Surr)	70-130

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Method Blank - Batch: 490-253850

### Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-253850/7	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-07.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1341	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1341				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Method Blank - Batch: 490-253850

### Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-253850/7	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-07.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1341	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1341				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Freon-113	0.15	U	0.15	1.0
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate	% Rec	Acceptance Limits		
4-Bromofluorobenzene (Surr)	109	70 - 130		
Dibromofluoromethane (Surr)	99	70 - 130		
Toluene-d8 (Surr)	106	70 - 130		
1,2-Dichloroethane-d4 (Surr)	100	70 - 130		

### Method Blank TICs- Batch: 490-253850

Cas Number	Analyte	RT	Est. Result (ug/	Qual
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-253850      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-253850/3	Analysis Batch: 490-253850	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060515-03.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/05/2015 1148	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/05/2015 1148		10 mL
Leach Date: N/A		

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LCSD Lab Sample ID: LCSD 490-253850/4	Analysis Batch: 490-253850	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060515-04.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/05/2015 1216	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/05/2015 1216		10 mL
Leach Date: N/A		

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Acetone	87	93	40 - 160	6	20	
Benzene	100	96	70 - 130	4	20	
Bromoform	105	105	70 - 130	0	20	
Bromomethane	85	88	40 - 160	3	20	
2-Butanone (MEK)	101	100	40 - 160	0	20	
Carbon disulfide	90	87	40 - 160	4	20	
Carbon tetrachloride	95	94	70 - 130	1	20	
Chlorobenzene	99	99	70 - 130	0	20	
Chlorodibromomethane	106	106	70 - 130	0	20	
Chloroethane	101	103	40 - 160	2	20	
Chloroform	101	99	70 - 130	2	20	
Chloromethane	85	90	40 - 160	6	20	
cis-1,2-Dichloroethene	97	95	70 - 130	2	20	
cis-1,3-Dichloropropene	100	101	70 - 130	1	20	
Cyclohexane	100	94	70 - 130	6	20	
1,2-Dibromo-3-Chloropropane	102	104	40 - 160	2	20	
1,2-Dichlorobenzene	104	102	70 - 130	2	20	
1,3-Dichlorobenzene	105	105	70 - 130	0	20	
1,4-Dichlorobenzene	99	99	70 - 130	0	20	
Dichlorobromomethane	94	96	70 - 130	2	20	
Dichlorodifluoromethane	93	93	40 - 160	0	20	
1,1-Dichloroethane	94	97	70 - 130	3	20	
1,2-Dichloroethane	92	91	70 - 130	1	20	
1,1-Dichloroethene	92	92	70 - 130	0	20	
1,2-Dichloropropane	93	94	70 - 130	1	20	
Ethylbenzene	106	105	70 - 130	0	20	
1,2-Dibromoethane	102	101	70 - 130	0	20	
2-Hexanone	112	112	40 - 160	0	20	
Isopropylbenzene	110	108	70 - 130	1	20	
Methyl acetate	96	96	70 - 130	0	20	
Methylcyclohexane	95	95	70 - 130	0	20	
Methylene Chloride	98	100	70 - 130	2	20	
4-Methyl-2-pentanone (MIBK)	99	99	40 - 160	0	20	
Methyl tert-butyl ether	94	96	70 - 130	2	20	
Styrene	111	110	70 - 130	1	20	
1,1,2,2-Tetrachloroethane	100	100	70 - 130	0	20	

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-253850      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID:	LCS 490-253850/3	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-03.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1148	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1148				10 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 490-253850/4	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-04.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 1216	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 1216				10 mL
Leach Date:	N/A				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Tetrachloroethene	92	92	70 - 130	0	20	
Toluene	97	96	70 - 130	0	20	
trans-1,2-Dichloroethene	96	97	70 - 130	1	20	
trans-1,3-Dichloropropene	102	102	70 - 130	0	20	
1,2,4-Trichlorobenzene	110	109	70 - 130	1	20	
1,1,1-Trichloroethane	94	92	70 - 130	3	20	
1,1,2-Trichloroethane	93	94	70 - 130	1	20	
Trichloroethene	92	93	70 - 130	1	20	
Trichlorofluoromethane	91	92	40 - 160	1	20	
Freon-113	90	90	70 - 130	0	20	
Vinyl chloride	95	97	70 - 130	2	20	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene (Surr)	107		108		70 - 130	
Dibromofluoromethane (Surr)	103		100		70 - 130	
1,2-Dichloroethane-d4 (Surr)	101		100		70 - 130	

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 490-253850**

**Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-253850/3      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/05/2015 1148  
 Prep Date: 06/05/2015 1148  
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-253850/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/05/2015 1216  
 Prep Date: 06/05/2015 1216  
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acetone	250	250	219	232
Benzene	50.0	50.0	50.2	48.2
Bromoform	50.0	50.0	52.6	52.4
Bromomethane	50.0	50.0	42.7	44.0
2-Butanone (MEK)	250	250	251	251
Carbon disulfide	50.0	50.0	45.2	43.6
Carbon tetrachloride	50.0	50.0	47.7	47.2
Chlorobenzene	50.0	50.0	49.6	49.5
Chlorodibromomethane	50.0	50.0	52.9	53.0
Chloroethane	50.0	50.0	50.3	51.3
Chloroform	50.0	50.0	50.6	49.7
Chloromethane	50.0	50.0	42.5	45.0
cis-1,2-Dichloroethene	50.0	50.0	48.7	47.6
cis-1,3-Dichloropropene	50.0	50.0	50.2	50.5
Cyclohexane	50.0	50.0	50.0	47.0
1,2-Dibromo-3-Chloropropane	50.0	50.0	51.1	52.1
1,2-Dichlorobenzene	50.0	50.0	52.1	51.0
1,3-Dichlorobenzene	50.0	50.0	52.7	52.6
1,4-Dichlorobenzene	50.0	50.0	49.6	49.4
Dichlorobromomethane	50.0	50.0	47.1	48.2
Dichlorodifluoromethane	50.0	50.0	46.3	46.5
1,1-Dichloroethane	50.0	50.0	47.1	48.6
1,2-Dichloroethane	50.0	50.0	45.8	45.3
1,1-Dichloroethene	50.0	50.0	46.2	46.0
1,2-Dichloropropane	50.0	50.0	46.4	46.8
Ethylbenzene	50.0	50.0	52.9	52.7
1,2-Dibromoethane	50.0	50.0	50.8	50.7
2-Hexanone	250	250	279	280
Isopropylbenzene	50.0	50.0	54.8	54.0
Methyl acetate	250	250	240	239
Methylcyclohexane	50.0	50.0	47.4	47.3
Methylene Chloride	50.0	50.0	49.0	50.2
4-Methyl-2-pentanone (MIBK)	250	250	247	247
Methyl tert-butyl ether	50.0	50.0	47.2	48.0
Styrene	50.0	50.0	55.7	55.0
1,1,2,2-Tetrachloroethane	50.0	50.0	50.2	50.2
Tetrachloroethene	50.0	50.0	46.0	45.8
Toluene	50.0	50.0	48.3	48.0
trans-1,2-Dichloroethene	50.0	50.0	48.0	48.4

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 490-253850**

**Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-253850/3      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 1148  
Prep Date: 06/05/2015 1148  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-253850/4  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 1216  
Prep Date: 06/05/2015 1216  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
trans-1,3-Dichloropropene	50.0	50.0	51.0	51.0
1,2,4-Trichlorobenzene	50.0	50.0	55.0	54.7
1,1,1-Trichloroethane	50.0	50.0	47.2	45.9
1,1,2-Trichloroethane	50.0	50.0	46.6	46.9
Trichloroethene	50.0	50.0	46.2	46.7
Trichlorofluoromethane	50.0	50.0	45.3	45.8
Freon-113	50.0	50.0	44.9	44.9
Vinyl chloride	50.0	50.0	47.5	48.5

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-253850

**Method: 8260C**  
**Preparation: 5030C**

MS Lab Sample ID:	490-79781-1	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-26.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2238			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2238				10 mL
Leach Date:	N/A				

MSD Lab Sample ID:	490-79781-1	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-27.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2307			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2307				10 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	85	87	40 - 160	2	20		
Benzene	93	96	70 - 130	4	20		
Bromoform	98	104	70 - 130	5	20		
Bromomethane	56	69	40 - 160	21	20		F2
2-Butanone (MEK)	88	92	70 - 130	5	20		
Carbon disulfide	89	90	40 - 160	1	20		
Carbon tetrachloride	93	95	70 - 130	2	20		
Chlorobenzene	96	99	70 - 130	2	20		
Chlorodibromomethane	102	106	70 - 130	3	20		
Chloroethane	98	101	40 - 160	4	20		
Chloroform	93	95	70 - 130	3	20		
Chloromethane	83	86	40 - 160	3	20		
cis-1,2-Dichloroethene	90	91	70 - 130	1	20		
cis-1,3-Dichloropropene	95	102	70 - 130	6	20		
Cyclohexane	93	96	70 - 130	3	20		
1,2-Dibromo-3-Chloropropane	101	109	40 - 160	8	20		
1,2-Dichlorobenzene	100	103	70 - 130	2	20		
1,3-Dichlorobenzene	102	105	70 - 130	4	20		
1,4-Dichlorobenzene	96	97	70 - 130	1	20		
Dichlorobromomethane	89	94	70 - 130	5	20		
Dichlorodifluoromethane	80	81	40 - 160	2	20		
1,1-Dichloroethane	93	93	70 - 130	1	20		
1,2-Dichloroethane	85	88	70 - 130	4	20		
1,1-Dichloroethene	93	96	70 - 130	3	20		
1,2-Dichloropropane	90	95	70 - 130	5	20		
Ethylbenzene	104	106	70 - 130	1	20		
1,2-Dibromoethane	97	100	70 - 130	3	20		
2-Hexanone	101	108	40 - 160	6	20		
Isopropylbenzene	108	111	70 - 130	3	20		
Methyl acetate	87	89	70 - 130	3	20		
Methylcyclohexane	90	94	70 - 130	4	20		
Methylene Chloride	95	98	70 - 130	3	20		
4-Methyl-2-pentanone (MIBK)	94	100	40 - 160	6	20		

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-253850**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID:	490-79781-1	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-26.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2238			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2238				10 mL
Leach Date:	N/A				

MSD Lab Sample ID:	490-79781-1	Analysis Batch:	490-253850	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-27.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/05/2015 2307			Final Weight/Volume:	10 mL
Prep Date:	06/05/2015 2307				10 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methyl tert-butyl ether	89	92	70 - 130	4	20		
Styrene	107	110	70 - 130	2	20		
1,1,2,2-Tetrachloroethane	96	101	70 - 130	5	20		
Tetrachloroethene	89	89	70 - 130	1	20		
Toluene	92	92	70 - 130	1	20		
trans-1,2-Dichloroethene	94	94	70 - 130	1	20		
trans-1,3-Dichloropropene	95	98	70 - 130	3	20		
1,2,4-Trichlorobenzene	102	107	70 - 130	5	20		
1,1,1-Trichloroethane	90	92	70 - 130	2	20		
1,1,2-Trichloroethane	88	89	70 - 130	1	20		
Trichloroethene	92	95	70 - 130	3	20		
Trichlorofluoromethane	88	90	40 - 160	2	20		
Freon-113	86	88	70 - 130	2	20		
Vinyl chloride	98	102	70 - 130	4	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene (Surr)	110		111		70 - 130		
Dibromofluoromethane (Surr)	96		97		70 - 130		
1,2-Dichloroethane-d4 (Surr)	94		97		70 - 130		

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-253850

**Method: 8260C**  
**Preparation: 5030C**

MS Lab Sample ID: 490-79781-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 2238  
Prep Date: 06/05/2015 2238  
Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 490-79781-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 2307  
Prep Date: 06/05/2015 2307  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	2.7 U	250	250	213	217
Benzene	1.6 U	50.0	50.0	47.9	49.7
Bromoform	0.29 U	50.0	50.0	49.2	52.0
Bromomethane	0.35 U	50.0	50.0	28.2	34.7 F2
2-Butanone (MEK)	2.6 U	250	250	220	231
Carbon disulfide	0.22 U	50.0	50.0	44.3	44.9
Carbon tetrachloride	0.18 U	50.0	50.0	46.4	47.4
Chlorobenzene	0.27 J	50.0	50.0	48.5	49.5
Chlorodibromomethane	0.25 U	50.0	50.0	51.1	52.9
Chloroethane	1.1 U	50.0	50.0	49.9	51.8
Chloroform	0.23 U	50.0	50.0	46.5	47.6
Chloromethane	0.36 U	50.0	50.0	41.7	43.0
cis-1,2-Dichloroethene	0.21 U	50.0	50.0	45.2	45.7
cis-1,3-Dichloropropene	0.17 U	50.0	50.0	47.7	50.9
Cyclohexane	1.7 U	50.0	50.0	48.3	49.5
1,2-Dibromo-3-Chloropropane	0.94 U	50.0	50.0	50.6	54.6
1,2-Dichlorobenzene	0.19 U	50.0	50.0	50.1	51.3
1,3-Dichlorobenzene	0.18 U	50.0	50.0	50.8	52.7
1,4-Dichlorobenzene	0.17 U	50.0	50.0	47.9	48.6
Dichlorobromomethane	0.17 U	50.0	50.0	44.7	46.8
Dichlorodifluoromethane	0.70 U	50.0	50.0	40.6	41.2
1,1-Dichloroethane	0.24 U	50.0	50.0	46.3	46.6
1,2-Dichloroethane	0.20 U	50.0	50.0	42.3	44.1
1,1-Dichloroethene	0.25 U	50.0	50.0	46.7	48.1
1,2-Dichloropropane	0.25 U	50.0	50.0	45.2	47.7
Ethylbenzene	0.76 U	50.0	50.0	53.0	53.7
1,2-Dibromoethane	0.21 U	50.0	50.0	48.5	49.8
2-Hexanone	1.3 U	250	250	252	269
Isopropylbenzene	1.3 U	50.0	50.0	55.4	57.0
Methyl acetate	0.58 U	250	250	217	223
Methylcyclohexane	1.2 U	50.0	50.0	46.0	48.0
Methylene Chloride	0.22 U	50.0	50.0	47.6	49.2
4-Methyl-2-pentanone (MIBK)	0.81 U	250	250	236	251
Methyl tert-butyl ether	0.17 U	50.0	50.0	44.4	46.0
Styrene	0.28 U	50.0	50.0	53.6	54.9
1,1,2,2-Tetrachloroethane	0.19 U	50.0	50.0	47.9	50.3
Tetrachloroethene	0.14 U	50.0	50.0	44.4	44.7
Toluene	0.76 U	50.0	50.0	46.6	46.9
trans-1,2-Dichloroethene	0.23 U	50.0	50.0	46.8	47.2
trans-1,3-Dichloropropene	0.17 U	50.0	50.0	47.5	49.0
1,2,4-Trichlorobenzene	0.20 U	50.0	50.0	50.9	53.5
1,1,1-Trichloroethane	0.19 U	50.0	50.0	45.2	46.2
1,1,2-Trichloroethane	0.19 U	50.0	50.0	44.1	44.5

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-253850

Method: 8260C  
Preparation: 5030C

MS Lab Sample ID: 490-79781-1      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 2238  
Prep Date: 06/05/2015 2238  
Leach Date: N/A

MSD Lab Sample ID: 490-79781-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/05/2015 2307  
Prep Date: 06/05/2015 2307  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Trichloroethene	0.20 U	50.0	50.0	45.9	47.5
Trichlorofluoromethane	0.21 U	50.0	50.0	44.1	45.1
Freon-113	0.15 U	50.0	50.0	43.1	43.9
Vinyl chloride	0.18 U	50.0	50.0	49.2	51.2

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Method Blank - Batch: 490-254074

## Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-254074/7	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-34.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0223	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0223				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Method Blank - Batch: 490-254074

### Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-254074/7	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-34.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0223	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0223				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Freon-113	0.15	U	0.15	1.0
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate	% Rec	Acceptance Limits		
4-Bromofluorobenzene (Surr)	111	70 - 130		
Dibromofluoromethane (Surr)	96	70 - 130		
Toluene-d8 (Surr)	110	70 - 130		
1,2-Dichloroethane-d4 (Surr)	97	70 - 130		

### Method Blank TICs- Batch: 490-254074

Cas Number	Analyte	RT	Est. Result (ug/	Qual
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-254074      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254074/3	Analysis Batch: 490-254074	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060515-30.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/06/2015 0031	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/06/2015 0031		10 mL
Leach Date: N/A		

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LCSD Lab Sample ID: LCSD 490-254074/4	Analysis Batch: 490-254074	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060515-31.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/06/2015 0059	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/06/2015 0059		10 mL
Leach Date: N/A		

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Acetone	95	96	40 - 160	0	20	
Benzene	94	95	70 - 130	1	20	
Bromoform	106	102	70 - 130	4	20	
Bromomethane	84	83	40 - 160	1	20	
2-Butanone (MEK)	92	93	40 - 160	2	20	
Carbon disulfide	84	84	40 - 160	0	20	
Carbon tetrachloride	91	91	70 - 130	0	20	
Chlorobenzene	98	97	70 - 130	1	20	
Chlorodibromomethane	105	103	70 - 130	2	20	
Chloroethane	102	100	40 - 160	3	20	
Chloroform	94	94	70 - 130	1	20	
Chloromethane	90	87	40 - 160	4	20	
cis-1,2-Dichloroethene	89	88	70 - 130	0	20	
cis-1,3-Dichloropropene	101	94	70 - 130	8	20	
Cyclohexane	94	92	70 - 130	2	20	
1,2-Dibromo-3-Chloropropane	110	107	40 - 160	3	20	
1,2-Dichlorobenzene	102	98	70 - 130	4	20	
1,3-Dichlorobenzene	105	103	70 - 130	2	20	
1,4-Dichlorobenzene	98	96	70 - 130	2	20	
Dichlorobromomethane	93	94	70 - 130	0	20	
Dichlorodifluoromethane	93	91	40 - 160	2	20	
1,1-Dichloroethane	93	92	70 - 130	1	20	
1,2-Dichloroethane	88	88	70 - 130	0	20	
1,1-Dichloroethene	92	91	70 - 130	2	20	
1,2-Dichloropropane	94	95	70 - 130	1	20	
Ethylbenzene	104	104	70 - 130	0	20	
1,2-Dibromoethane	101	100	70 - 130	1	20	
2-Hexanone	107	112	40 - 160	4	20	
Isopropylbenzene	107	106	70 - 130	2	20	
Methyl acetate	94	93	70 - 130	2	20	
Methylcyclohexane	91	92	70 - 130	1	20	
Methylene Chloride	97	97	70 - 130	1	20	
4-Methyl-2-pentanone (MIBK)	102	94	40 - 160	8	20	
Methyl tert-butyl ether	93	92	70 - 130	1	20	
Styrene	110	108	70 - 130	2	20	
1,1,2,2-Tetrachloroethane	100	102	70 - 130	2	20	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-254074      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID:	LCS 490-254074/3	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-30.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0031	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0031				10 mL
Leach Date:	N/A				

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LCSD Lab Sample ID:	LCSD 490-254074/4	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060515-31.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/06/2015 0059	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/06/2015 0059				10 mL
Leach Date:	N/A				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Tetrachloroethene	87	82	70 - 130	6	20	
Toluene	96	88	70 - 130	8	20	
trans-1,2-Dichloroethene	93	93	70 - 130	0	20	
trans-1,3-Dichloropropene	99	93	70 - 130	6	20	
1,2,4-Trichlorobenzene	108	106	70 - 130	2	20	
1,1,1-Trichloroethane	90	90	70 - 130	1	20	
1,1,2-Trichloroethane	89	85	70 - 130	4	20	
Trichloroethene	92	92	70 - 130	0	20	
Trichlorofluoromethane	89	87	40 - 160	2	20	
Freon-113	88	88	70 - 130	1	20	
Vinyl chloride	98	97	70 - 130	1	20	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene (Surr)	112		116		70 - 130	
Dibromofluoromethane (Surr)	96		98		70 - 130	
1,2-Dichloroethane-d4 (Surr)	96		97		70 - 130	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Control/ Laboratory Duplicate Data Report - Batch: 490-254074

**Method: 8260C**  
**Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254074/3      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/06/2015 0031  
 Prep Date: 06/06/2015 0031  
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-254074/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/06/2015 0059  
 Prep Date: 06/06/2015 0059  
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acetone	250	250	239	239
Benzene	50.0	50.0	47.0	47.5
Bromoform	50.0	50.0	52.9	50.9
Bromomethane	50.0	50.0	41.8	41.3
2-Butanone (MEK)	250	250	229	233
Carbon disulfide	50.0	50.0	42.0	42.0
Carbon tetrachloride	50.0	50.0	45.5	45.3
Chlorobenzene	50.0	50.0	48.9	48.6
Chlorodibromomethane	50.0	50.0	52.7	51.6
Chloroethane	50.0	50.0	51.1	49.8
Chloroform	50.0	50.0	47.2	46.9
Chloromethane	50.0	50.0	44.8	43.3
cis-1,2-Dichloroethene	50.0	50.0	44.4	44.2
cis-1,3-Dichloropropene	50.0	50.0	50.6	46.8
Cyclohexane	50.0	50.0	46.9	45.9
1,2-Dibromo-3-Chloropropane	50.0	50.0	54.8	53.3
1,2-Dichlorobenzene	50.0	50.0	51.1	49.2
1,3-Dichlorobenzene	50.0	50.0	52.7	51.6
1,4-Dichlorobenzene	50.0	50.0	49.1	48.1
Dichlorobromomethane	50.0	50.0	46.7	46.9
Dichlorodifluoromethane	50.0	50.0	46.3	45.6
1,1-Dichloroethane	50.0	50.0	46.3	45.8
1,2-Dichloroethane	50.0	50.0	44.2	44.2
1,1-Dichloroethene	50.0	50.0	46.1	45.4
1,2-Dichloropropane	50.0	50.0	47.1	47.6
Ethylbenzene	50.0	50.0	51.8	51.8
1,2-Dibromoethane	50.0	50.0	50.6	49.9
2-Hexanone	250	250	268	279
Isopropylbenzene	50.0	50.0	53.6	52.8
Methyl acetate	250	250	236	231
Methylcyclohexane	50.0	50.0	45.5	46.0
Methylene Chloride	50.0	50.0	48.7	48.3
4-Methyl-2-pentanone (MIBK)	250	250	254	235
Methyl tert-butyl ether	50.0	50.0	46.3	45.9
Styrene	50.0	50.0	55.0	53.9
1,1,2,2-Tetrachloroethane	50.0	50.0	49.9	50.8
Tetrachloroethene	50.0	50.0	43.5	40.8
Toluene	50.0	50.0	47.8	44.2
trans-1,2-Dichloroethene	50.0	50.0	46.3	46.3

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 490-254074**

**Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254074/3      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/06/2015 0031  
Prep Date: 06/06/2015 0031  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-254074/4  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/06/2015 0059  
Prep Date: 06/06/2015 0059  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
trans-1,3-Dichloropropene	50.0	50.0	49.6	46.5
1,2,4-Trichlorobenzene	50.0	50.0	54.0	52.8
1,1,1-Trichloroethane	50.0	50.0	45.2	44.9
1,1,2-Trichloroethane	50.0	50.0	44.4	42.7
Trichloroethylene	50.0	50.0	46.1	46.1
Trichlorofluoromethane	50.0	50.0	44.6	43.7
Freon-113	50.0	50.0	44.2	43.8
Vinyl chloride	50.0	50.0	49.1	48.4

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254074**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID:	490-79645-1	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-05.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1218			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1218				10 mL
Leach Date:	N/A				

MSD Lab Sample ID:	490-79645-1	Analysis Batch:	490-254074	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-06.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1246			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1246				10 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	91	92	40 - 160	1	20		
Benzene	98	99	70 - 130	1	20		
Bromoform	97	98	70 - 130	1	20		
Bromomethane	84	87	40 - 160	3	20		
2-Butanone (MEK)	90	91	70 - 130	1	20		
Carbon disulfide	100	102	40 - 160	2	20		
Carbon tetrachloride	94	94	70 - 130	1	20		
Chlorobenzene	99	101	70 - 130	2	20		
Chlorodibromomethane	102	103	70 - 130	1	20		
Chloroethane	114	116	40 - 160	2	20		
Chloroform	95	96	70 - 130	1	20		
Chloromethane	108	112	40 - 160	4	20		
cis-1,2-Dichloroethene	96	96	70 - 130	1	20		
cis-1,3-Dichloropropene	93	95	70 - 130	2	20		
Cyclohexane	107	107	70 - 130	1	20		
1,2-Dibromo-3-Chloropropane	98	102	40 - 160	4	20		
1,2-Dichlorobenzene	102	103	70 - 130	1	20		
1,3-Dichlorobenzene	106	108	70 - 130	2	20		
1,4-Dichlorobenzene	98	99	70 - 130	1	20		
Dichlorobromomethane	92	93	70 - 130	1	20		
Dichlorodifluoromethane	110	111	40 - 160	1	20		
1,1-Dichloroethane	100	101	70 - 130	1	20		
1,2-Dichloroethane	86	87	70 - 130	1	20		
1,1-Dichloroethene	103	104	70 - 130	1	20		
1,2-Dichloropropane	96	96	70 - 130	1	20		
Ethylbenzene	109	111	70 - 130	2	20		
1,2-Dibromoethane	98	99	70 - 130	1	20		
2-Hexanone	108	108	40 - 160	0	20		
Isopropylbenzene	111	113	70 - 130	1	20		
Methyl acetate	92	92	70 - 130	0	20		
Methylcyclohexane	104	104	70 - 130	0	20		
Methylene Chloride	105	105	70 - 130	0	20		
4-Methyl-2-pentanone (MIBK)	87	88	40 - 160	2	20		

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254074**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID: 490-79645-1	Analysis Batch: 490-254074	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060815-05.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/08/2015 1218		Final Weight/Volume: 10 mL
Prep Date: 06/08/2015 1218		10 mL
Leach Date: N/A		

MSD Lab Sample ID: 490-79645-1	Analysis Batch: 490-254074	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060815-06.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/08/2015 1246		Final Weight/Volume: 10 mL
Prep Date: 06/08/2015 1246		10 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methyl tert-butyl ether	92	93	70 - 130	1	20		
Styrene	110	112	70 - 130	2	20		
1,1,2,2-Tetrachloroethane	101	102	70 - 130	1	20		
Tetrachloroethene	84	86	70 - 130	2	20		
Toluene	89	89	70 - 130	1	20		
trans-1,2-Dichloroethene	103	104	70 - 130	1	20		
trans-1,3-Dichloropropene	92	92	70 - 130	1	20		
1,2,4-Trichlorobenzene	108	110	70 - 130	2	20		
1,1,1-Trichloroethane	92	93	70 - 130	0	20		
1,1,2-Trichloroethane	81	82	70 - 130	1	20		
Trichloroethene	93	94	70 - 130	1	20		
Trichlorofluoromethane	99	100	40 - 160	1	20		
Freon-113	101	101	70 - 130	0	20		
Vinyl chloride	120	122	70 - 130	2	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene (Surr)	117		118		70 - 130		
Dibromofluoromethane (Surr)	95		94		70 - 130		
1,2-Dichloroethane-d4 (Surr)	95		94		70 - 130		

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254074**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID: 490-79645-1  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 1218  
 Prep Date: 06/08/2015 1218  
 Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 490-79645-1  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 1246  
 Prep Date: 06/08/2015 1246  
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	2.7 U	250	250	228	230
Benzene	0.20 U	50.0	50.0	49.2	49.5
Bromoform	0.29 U	50.0	50.0	48.6	48.9
Bromomethane	0.35 U	50.0	50.0	42.0	43.4
2-Butanone (MEK)	2.6 U	250	250	225	227
Carbon disulfide	0.22 U	50.0	50.0	49.8	50.9
Carbon tetrachloride	0.18 U	50.0	50.0	46.8	47.1
Chlorobenzene	0.18 U	50.0	50.0	49.6	50.4
Chlorodibromomethane	0.25 U	50.0	50.0	50.9	51.4
Chloroethane	0.36 U	50.0	50.0	57.0	58.1
Chloroform	0.23 U	50.0	50.0	47.6	48.1
Chloromethane	0.36 U	50.0	50.0	53.9	55.9
cis-1,2-Dichloroethene	0.21 U	50.0	50.0	48.2	47.9
cis-1,3-Dichloropropene	0.17 U	50.0	50.0	46.6	47.7
Cyclohexane	0.13 U	50.0	50.0	53.7	53.4
1,2-Dibromo-3-Chloropropane	0.94 U	50.0	50.0	49.2	51.1
1,2-Dichlorobenzene	0.19 U	50.0	50.0	51.0	51.3
1,3-Dichlorobenzene	0.18 U	50.0	50.0	53.1	54.0
1,4-Dichlorobenzene	0.17 U	50.0	50.0	49.1	49.7
Dichlorobromomethane	0.17 U	50.0	50.0	46.1	46.5
Dichlorodifluoromethane	0.17 U	50.0	50.0	55.1	55.7
1,1-Dichloroethane	0.24 U	50.0	50.0	50.0	50.6
1,2-Dichloroethane	0.20 U	50.0	50.0	43.0	43.3
1,1-Dichloroethene	0.25 U	50.0	50.0	51.7	52.2
1,2-Dichloropropane	0.25 U	50.0	50.0	47.8	48.2
Ethylbenzene	0.19 U	50.0	50.0	54.6	55.6
1,2-Dibromoethane	0.21 U	50.0	50.0	49.2	49.6
2-Hexanone	1.3 U	250	250	270	270
Isopropylbenzene	0.33 U	50.0	50.0	55.7	56.5
Methyl acetate	0.58 U	250	250	229	229
Methylcyclohexane	0.090 U	50.0	50.0	51.8	51.8
Methylene Chloride	0.22 U	50.0	50.0	52.5	52.3
4-Methyl-2-pentanone (MIBK)	0.81 U	250	250	217	220
Methyl tert-butyl ether	0.17 U	50.0	50.0	46.1	46.4
Styrene	0.28 U	50.0	50.0	54.9	55.8
1,1,2,2-Tetrachloroethane	0.19 U	50.0	50.0	50.4	51.2
Tetrachloroethene	0.14 U	50.0	50.0	42.1	43.1
Toluene	0.17 U	50.0	50.0	44.4	44.7
trans-1,2-Dichloroethene	0.23 U	50.0	50.0	51.3	51.8
trans-1,3-Dichloropropene	0.17 U	50.0	50.0	46.0	46.2
1,2,4-Trichlorobenzene	0.20 U	50.0	50.0	54.2	55.0
1,1,1-Trichloroethane	0.19 U	50.0	50.0	46.1	46.3
1,1,2-Trichloroethane	0.19 U	50.0	50.0	40.7	41.2

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### **Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254074**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID: 490-79645-1      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 1218  
Prep Date: 06/08/2015 1218  
Leach Date: N/A

MSD Lab Sample ID: 490-79645-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 1246  
Prep Date: 06/08/2015 1246  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Trichloroethene	0.20 U	50.0	50.0	46.5	47.1
Trichlorofluoromethane	0.21 U	50.0	50.0	49.6	50.2
Freon-113	0.15 U	50.0	50.0	50.6	50.6
Vinyl chloride	0.18 U	50.0	50.0	60.0	61.0

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Method Blank - Batch: 490-254379

## Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-254379/7	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-09.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1408	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1408				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	2.7	U	2.7	5.0
Benzene	0.20	U	0.20	0.50
Bromoform	0.29	U	0.29	0.50
Bromomethane	0.35	U	0.35	0.50
2-Butanone (MEK)	2.6	U	2.6	50
Carbon disulfide	0.22	U	0.22	0.50
Carbon tetrachloride	0.18	U	0.18	0.50
Chlorobenzene	0.18	U	0.18	0.50
Chlorodibromomethane	0.25	U	0.25	0.50
Chloroethane	0.36	U	0.36	0.50
Chloroform	0.23	U	0.23	0.50
Chloromethane	0.36	U	0.36	0.50
cis-1,2-Dichloroethene	0.21	U	0.21	0.50
cis-1,3-Dichloropropene	0.17	U	0.17	0.50
Cyclohexane	0.13	U	0.13	1.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	5.0
1,2-Dichlorobenzene	0.19	U	0.19	0.50
1,3-Dichlorobenzene	0.18	U	0.18	0.50
1,4-Dichlorobenzene	0.17	U	0.17	0.50
Dichlorobromomethane	0.17	U	0.17	0.50
Dichlorodifluoromethane	0.17	U	0.17	0.50
1,1-Dichloroethane	0.24	U	0.24	0.50
1,2-Dichloroethane	0.20	U	0.20	0.50
1,1-Dichloroethene	0.25	U	0.25	0.50
1,2-Dichloropropane	0.25	U	0.25	0.50
Ethylbenzene	0.19	U	0.19	0.50
1,2-Dibromoethane	0.21	U	0.21	0.50
2-Hexanone	1.3	U	1.3	5.0
Isopropylbenzene	0.33	U	0.33	1.0
Methyl acetate	0.58	U	0.58	10
Methylcyclohexane	0.090	U	0.090	0.50
Methylene Chloride	0.22	U	0.22	3.0
4-Methyl-2-pentanone (MIBK)	0.81	U	0.81	5.0
Methyl tert-butyl ether	0.17	U	0.17	0.50
Styrene	0.28	U	0.28	0.50
1,1,2,2-Tetrachloroethane	0.19	U	0.19	0.50
Tetrachloroethene	0.14	U	0.14	0.50
Toluene	0.17	U	0.17	0.50
trans-1,2-Dichloroethene	0.23	U	0.23	0.50
trans-1,3-Dichloropropene	0.17	U	0.17	0.50
1,2,4-Trichlorobenzene	0.20	U	0.20	0.50
1,1,1-Trichloroethane	0.19	U	0.19	0.50
1,1,2-Trichloroethane	0.19	U	0.19	0.50
Trichloroethene	0.20	U	0.20	0.50
Trichlorofluoromethane	0.21	U	0.21	0.50

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Method Blank - Batch: 490-254379

## Method: 8260C Preparation: 5030C

Lab Sample ID:	MB 490-254379/7	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-09.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1408	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1408				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Freon-113	0.15	U	0.15	1.0
Vinyl chloride	0.18	U	0.18	0.50
Xylenes, Total	0.58	U	0.58	1.0
Surrogate	% Rec	Acceptance Limits		
4-Bromofluorobenzene (Surr)	116	70 - 130		
Dibromofluoromethane (Surr)	98	70 - 130		
Toluene-d8 (Surr)	100	70 - 130		
1,2-Dichloroethane-d4 (Surr)	98	70 - 130		

## Method Blank TICs- Batch: 490-254379

Cas Number	Analyte	RT	Est. Result (ug/	Qual
	Tentatively Identified Compound		None	
	Total Alkanes TIC		None	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-254379      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254379/3	Analysis Batch: 490-254379	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060815-03.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/08/2015 1123	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/08/2015 1123		10 mL
Leach Date: N/A		

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LCSD Lab Sample ID: LCSD 490-254379/4	Analysis Batch: 490-254379	Instrument ID: HP32
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 060815-04.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 10 mL
Analysis Date: 06/08/2015 1151	Units: ug/L	Final Weight/Volume: 10 mL
Prep Date: 06/08/2015 1151		10 mL
Leach Date: N/A		

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Acetone	97	98	40 - 160	1	20	
Benzene	98	95	70 - 130	3	20	
Bromoform	100	100	70 - 130	0	20	
Bromomethane	82	80	40 - 160	3	20	
2-Butanone (MEK)	92	96	40 - 160	5	20	
Carbon disulfide	97	93	40 - 160	4	20	
Carbon tetrachloride	89	87	70 - 130	3	20	
Chlorobenzene	100	98	70 - 130	2	20	
Chlorodibromomethane	105	104	70 - 130	1	20	
Chloroethane	112	109	40 - 160	3	20	
Chloroform	96	93	70 - 130	3	20	
Chloromethane	108	107	40 - 160	1	20	
cis-1,2-Dichloroethene	95	92	70 - 130	3	20	
cis-1,3-Dichloropropene	96	93	70 - 130	4	20	
Cyclohexane	99	95	70 - 130	4	20	
1,2-Dibromo-3-Chloropropane	105	107	40 - 160	2	20	
1,2-Dichlorobenzene	102	101	70 - 130	1	20	
1,3-Dichlorobenzene	107	106	70 - 130	1	20	
1,4-Dichlorobenzene	100	99	70 - 130	1	20	
Dichlorobromomethane	93	92	70 - 130	2	20	
Dichlorodifluoromethane	105	101	40 - 160	4	20	
1,1-Dichloroethane	100	97	70 - 130	3	20	
1,2-Dichloroethane	86	86	70 - 130	0	20	
1,1-Dichloroethene	100	96	70 - 130	3	20	
1,2-Dichloropropane	96	95	70 - 130	1	20	
Ethylbenzene	108	105	70 - 130	3	20	
1,2-Dibromoethane	101	100	70 - 130	1	20	
2-Hexanone	110	111	40 - 160	1	20	
Isopropylbenzene	109	106	70 - 130	2	20	
Methyl acetate	96	95	70 - 130	1	20	
Methylcyclohexane	93	91	70 - 130	2	20	
Methylene Chloride	104	102	70 - 130	1	20	
4-Methyl-2-pentanone (MIBK)	90	91	40 - 160	1	20	
Methyl tert-butyl ether	93	94	70 - 130	1	20	
Styrene	110	108	70 - 130	2	20	
1,1,2,2-Tetrachloroethane	104	105	70 - 130	1	20	

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 490-254379      Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID:	LCS 490-254379/3	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-03.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1123	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1123				10 mL
Leach Date:	N/A				

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LCSD Lab Sample ID:	LCSD 490-254379/4	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-04.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 1151	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 1151				10 mL
Leach Date:	N/A				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Tetrachloroethene	84	80	70 - 130	5	20	
Toluene	90	86	70 - 130	5	20	
trans-1,2-Dichloroethene	100	98	70 - 130	2	20	
trans-1,3-Dichloropropene	94	93	70 - 130	2	20	
1,2,4-Trichlorobenzene	106	108	70 - 130	1	20	
1,1,1-Trichloroethane	90	87	70 - 130	3	20	
1,1,2-Trichloroethane	84	83	70 - 130	1	20	
Trichloroethene	92	89	70 - 130	3	20	
Trichlorofluoromethane	93	90	40 - 160	4	20	
Freon-113	93	90	70 - 130	3	20	
Vinyl chloride	116	112	70 - 130	3	20	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene (Surr)	119		119		70 - 130	
Dibromofluoromethane (Surr)	95		94		70 - 130	
1,2-Dichloroethane-d4 (Surr)	94		95		70 - 130	

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Control/ Laboratory Duplicate Data Report - Batch: 490-254379

**Method: 8260C**  
**Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254379/3      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 1123  
 Prep Date: 06/08/2015 1123  
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-254379/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 1151  
 Prep Date: 06/08/2015 1151  
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acetone	250	250	243	246
Benzene	50.0	50.0	48.9	47.5
Bromoform	50.0	50.0	49.9	49.8
Bromomethane	50.0	50.0	41.0	39.9
2-Butanone (MEK)	250	250	230	241
Carbon disulfide	50.0	50.0	48.4	46.6
Carbon tetrachloride	50.0	50.0	44.7	43.3
Chlorobenzene	50.0	50.0	49.9	48.8
Chlorodibromomethane	50.0	50.0	52.3	51.8
Chloroethane	50.0	50.0	56.1	54.3
Chloroform	50.0	50.0	48.0	46.7
Chloromethane	50.0	50.0	54.2	53.6
cis-1,2-Dichloroethene	50.0	50.0	47.6	46.0
cis-1,3-Dichloropropene	50.0	50.0	48.1	46.3
Cyclohexane	50.0	50.0	49.4	47.5
1,2-Dibromo-3-Chloropropane	50.0	50.0	52.3	53.5
1,2-Dichlorobenzene	50.0	50.0	50.9	50.6
1,3-Dichlorobenzene	50.0	50.0	53.5	52.8
1,4-Dichlorobenzene	50.0	50.0	49.9	49.4
Dichlorobromomethane	50.0	50.0	46.5	45.8
Dichlorodifluoromethane	50.0	50.0	52.5	50.5
1,1-Dichloroethane	50.0	50.0	49.9	48.3
1,2-Dichloroethane	50.0	50.0	43.0	43.0
1,1-Dichloroethene	50.0	50.0	49.8	48.2
1,2-Dichloropropane	50.0	50.0	47.9	47.3
Ethylbenzene	50.0	50.0	54.1	52.7
1,2-Dibromoethane	50.0	50.0	50.4	50.1
2-Hexanone	250	250	275	278
Isopropylbenzene	50.0	50.0	54.4	53.1
Methyl acetate	250	250	239	237
Methylcyclohexane	50.0	50.0	46.7	45.7
Methylene Chloride	50.0	50.0	52.0	51.2
4-Methyl-2-pentanone (MIBK)	250	250	225	227
Methyl tert-butyl ether	50.0	50.0	46.7	47.1
Styrene	50.0	50.0	55.1	54.0
1,1,2,2-Tetrachloroethane	50.0	50.0	51.9	52.6
Tetrachloroethene	50.0	50.0	41.8	39.9
Toluene	50.0	50.0	45.1	42.9
trans-1,2-Dichloroethene	50.0	50.0	50.2	49.0

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 490-254379**

**Method: 8260C  
Preparation: 5030C**

LCS Lab Sample ID: LCS 490-254379/3      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 1123  
Prep Date: 06/08/2015 1123  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 490-254379/4  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 1151  
Prep Date: 06/08/2015 1151  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
trans-1,3-Dichloropropene	50.0	50.0	47.1	46.3
1,2,4-Trichlorobenzene	50.0	50.0	53.1	53.8
1,1,1-Trichloroethane	50.0	50.0	44.8	43.6
1,1,2-Trichloroethane	50.0	50.0	41.9	41.6
Trichloroethene	50.0	50.0	45.8	44.6
Trichlorofluoromethane	50.0	50.0	46.7	44.9
Freon-113	50.0	50.0	46.7	45.2
Vinyl chloride	50.0	50.0	57.8	56.1

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 490-254379**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID:	490-79558-B-2 MS	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-26.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2154			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2154				10 mL
Leach Date:	N/A				

MSD Lab Sample ID:	490-79558-C-2 MSD	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-27.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2221			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2221				10 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	99	102	40 - 160	3	20		
Benzene	101	100	70 - 130	1	20		
Bromoform	99	98	70 - 130	1	20		
Bromomethane	52	68	40 - 160	26	20		F2
2-Butanone (MEK)	95	94	70 - 130	1	20		
Carbon disulfide	99	98	40 - 160	1	20		
Carbon tetrachloride	94	93	70 - 130	0	20		
Chlorobenzene	103	101	70 - 130	2	20		
Chlorodibromomethane	105	104	70 - 130	1	20		
Chloroethane	116	116	40 - 160	0	20		
Chloroform	98	97	70 - 130	1	20		
Chloromethane	107	105	40 - 160	1	20		
cis-1,2-Dichloroethene	97	95	70 - 130	1	20		
cis-1,3-Dichloropropene	96	95	70 - 130	2	20		
Cyclohexane	107	107	70 - 130	0	20		
1,2-Dibromo-3-Chloropropane	107	106	40 - 160	1	20		
1,2-Dichlorobenzene	105	104	70 - 130	1	20		
1,3-Dichlorobenzene	108	108	70 - 130	0	20		
1,4-Dichlorobenzene	100	102	70 - 130	1	20		
Dichlorobromomethane	95	94	70 - 130	1	20		
Dichlorodifluoromethane	104	103	40 - 160	1	20		
1,1-Dichloroethane	101	100	70 - 130	1	20		
1,2-Dichloroethane	88	86	70 - 130	3	20		
1,1-Dichloroethene	106	105	70 - 130	0	20		
1,2-Dichloropropane	97	97	70 - 130	0	20		
Ethylbenzene	112	110	70 - 130	2	20		
1,2-Dibromoethane	102	100	70 - 130	2	20		
2-Hexanone	115	111	40 - 160	3	20		
Isopropylbenzene	114	113	70 - 130	1	20		
Methyl acetate	93	91	70 - 130	2	20		
Methylcyclohexane	104	103	70 - 130	1	20		
Methylene Chloride	108	108	70 - 130	0	20		
4-Methyl-2-pentanone (MIBK)	92	90	40 - 160	2	20		

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 490-254379**

**Method: 8260C  
Preparation: 5030C**

MS Lab Sample ID:	490-79558-B-2 MS	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-26.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2154			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2154				10 mL
Leach Date:	N/A				

MSD Lab Sample ID:	490-79558-C-2 MSD	Analysis Batch:	490-254379	Instrument ID:	HP32
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	060815-27.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	06/08/2015 2221			Final Weight/Volume:	10 mL
Prep Date:	06/08/2015 2221				10 mL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methyl tert-butyl ether	95	94	70 - 130	1	20		
Styrene	114	112	70 - 130	2	20		
1,1,2,2-Tetrachloroethane	106	105	70 - 130	2	20		
Tetrachloroethene	87	86	70 - 130	2	20		
Toluene	92	91	70 - 130	1	20		
trans-1,2-Dichloroethene	103	103	70 - 130	0	20		
trans-1,3-Dichloropropene	95	93	70 - 130	2	20		
1,2,4-Trichlorobenzene	109	108	70 - 130	0	20		
1,1,1-Trichloroethane	93	93	70 - 130	1	20		
1,1,2-Trichloroethane	86	85	70 - 130	1	20		
Trichloroethene	96	95	70 - 130	2	20		
Trichlorofluoromethane	99	97	40 - 160	2	20		
Freon-113	101	100	70 - 130	1	20		
Vinyl chloride	120	119	70 - 130	1	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene (Surr)	118		119		70 - 130		
Dibromofluoromethane (Surr)	95		95		70 - 130		
1,2-Dichloroethane-d4 (Surr)	93		94		70 - 130		

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254379

**Method: 8260C**  
**Preparation: 5030C**

MS Lab Sample ID: 490-79558-B-2 MS      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 2154  
 Prep Date: 06/08/2015 2154  
 Leach Date: N/A

MSD Lab Sample ID: 490-79558-C-2 MSD  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 06/08/2015 2221  
 Prep Date: 06/08/2015 2221  
 Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	1.93 U	250	250	247	255
Benzene	0.405 J	50.0	50.0	50.8	50.3
Bromoform	0.000 U	50.0	50.0	49.6	49.2
Bromomethane	0.000 U	50.0	50.0	26.1	33.8 F2
2-Butanone (MEK)	0.783 U	250	250	237	234
Carbon disulfide	0.000 U	50.0	50.0	49.7	49.2
Carbon tetrachloride	0.000 U	50.0	50.0	46.9	46.7
Chlorobenzene	0.000 U	50.0	50.0	51.5	50.4
Chlorodibromomethane	0.000 U	50.0	50.0	52.5	51.8
Chloroethane	0.000 U	50.0	50.0	58.1	57.9
Chloroform	0.000 U	50.0	50.0	49.2	48.7
Chloromethane	0.000 U	50.0	50.0	53.3	52.6
cis-1,2-Dichloroethene	0.000 U	50.0	50.0	48.4	47.7
cis-1,3-Dichloropropene	0.000 U	50.0	50.0	48.1	47.3
Cyclohexane	2.38	50.0	50.0	55.9	55.8
1,2-Dibromo-3-Chloropropane	0.000 U	50.0	50.0	53.3	52.8
1,2-Dichlorobenzene	0.000 U	50.0	50.0	52.3	51.9
1,3-Dichlorobenzene	0.000 U	50.0	50.0	54.2	54.0
1,4-Dichlorobenzene	0.000 U	50.0	50.0	50.1	50.9
Dichlorobromomethane	0.000 U	50.0	50.0	47.4	46.9
Dichlorodifluoromethane	0.000 U	50.0	50.0	52.1	51.5
1,1-Dichloroethane	0.000 U	50.0	50.0	50.7	50.2
1,2-Dichloroethane	0.000 U	50.0	50.0	44.2	43.1
1,1-Dichloroethene	0.000 U	50.0	50.0	52.8	52.6
1,2-Dichloropropane	0.000 U	50.0	50.0	48.4	48.4
Ethylbenzene	4.17	50.0	50.0	60.4	59.4
1,2-Dibromoethane	0.000 U	50.0	50.0	51.0	49.9
2-Hexanone	0.000 U	250	250	287	277
Isopropylbenzene	1.87	50.0	50.0	59.1	58.4
Methyl acetate	0.000 U	250	250	232	228
Methylcyclohexane	1.83	50.0	50.0	53.9	53.2
Methylene Chloride	0.000 U	50.0	50.0	54.1	53.9
4-Methyl-2-pentanone (MIBK)	0.000 U	250	250	231	226
Methyl tert-butyl ether	0.000 U	50.0	50.0	47.6	47.1
Styrene	0.000 U	50.0	50.0	56.9	55.9
1,1,2,2-Tetrachloroethane	0.000 U	50.0	50.0	53.1	52.3
Tetrachloroethene	0.000 U	50.0	50.0	43.7	43.0
Toluene	0.113	50.0	50.0	46.1	45.5
trans-1,2-Dichloroethene	0.000 U	50.0	50.0	51.3	51.3
trans-1,3-Dichloropropene	0.000 U	50.0	50.0	47.3	46.3
1,2,4-Trichlorobenzene	0.000 U	50.0	50.0	54.3	54.2
1,1,1-Trichloroethane	0.000 U	50.0	50.0	46.7	46.4
1,1,2-Trichloroethane	0.000 U	50.0	50.0	43.0	42.7

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 490-254379

Method: 8260C  
Preparation: 5030C

MS Lab Sample ID: 490-79558-B-2 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 2154  
Prep Date: 06/08/2015 2154  
Leach Date: N/A

MSD Lab Sample ID: 490-79558-C-2 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 06/08/2015 2221  
Prep Date: 06/08/2015 2221  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Trichloroethene	0.000 U	50.0	50.0	48.2	47.5
Trichlorofluoromethane	0.000 U	50.0	50.0	49.5	48.5
Freon-113	0.000 U	50.0	50.0	50.6	50.2
Vinyl chloride	0.000 U	50.0	50.0	59.8	59.4

## DATA REPORTING QUALIFIERS

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

Lab Section	Qualifier	Description
GC/MS VOA	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F2	MS/MSD RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.

## Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:490-253850</b>					
LCS 490-253850/3	Lab Control Sample	T	Water	8260C	
LCSD 490-253850/4	Lab Control Sample Duplicate	T	Water	8260C	
MB 490-253850/7	Method Blank	T	Water	8260C	
490-79781-1	SC-01-060215	T	Water	8260C	
490-79781-1MS	Matrix Spike	T	Water	8260C	
490-79781-1MSD	Matrix Spike Duplicate	T	Water	8260C	
490-79781-2	PMP-Pond-060215	T	Water	8260C	
490-79781-3	RW-6-060215	T	Water	8260C	
490-79781-4	PMP-50-060215	T	Water	8260C	
490-79781-5	PAB-00-060215	T	Water	8260C	
490-79781-6	PAB-01-060215	T	Water	8260C	
490-79781-7	PAB-02-060215	T	Water	8260C	
490-79781-8	PMP-180-060315	T	Water	8260C	
490-79781-9	PMP-230-060315	T	Water	8260C	
490-79781-10TB	Trip Blank	T	Water	8260C	
<b>Analysis Batch:490-254074</b>					
LCS 490-254074/3	Lab Control Sample	T	Water	8260C	
LCSD 490-254074/4	Lab Control Sample Duplicate	T	Water	8260C	
MB 490-254074/7	Method Blank	T	Water	8260C	
490-79645-1	OB-20A-060115	T	Water	8260C	
490-79645-1MS	Matrix Spike	T	Water	8260C	
490-79645-1MSD	Matrix Spike Duplicate	T	Water	8260C	
490-79645-2FB	FB-01-060115	T	Water	8260C	
490-79645-3	OB-20B-060115	T	Water	8260C	
490-79645-4FD	DUP-01-060115	T	Water	8260C	
490-79645-5	OB-27-060115	T	Water	8260C	
490-79645-6	OB-11R-060115	T	Water	8260C	
490-79645-9TB	Trip Blank	T	Water	8260C	
<b>Analysis Batch:490-254379</b>					
LCS 490-254379/3	Lab Control Sample	T	Water	8260C	
LCSD 490-254379/4	Lab Control Sample Duplicate	T	Water	8260C	
MB 490-254379/7	Method Blank	T	Water	8260C	
490-79558-B-2 MS	Matrix Spike	T	Water	8260C	
490-79558-C-2 MSD	Matrix Spike Duplicate	T	Water	8260C	
490-79645-7	SR-3-SEEP-060115	T	Water	8260C	
490-79645-8	RW-6A-060115	T	Water	8260C	
490-79781-10TB	Trip Blank	T	Water	8260C	

#### Report Basis

T = Total

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

**Lab ID:** 490-79645-1

**Client ID:** OB-20A-060115

Sample Date/Time: 06/01/2015 10:50      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-1		490-254074		06/06/2015 03:47	1	TAL NSH	EML
A:8260C	490-79645-A-1		490-254074		06/06/2015 03:47	1	TAL NSH	EML

**Lab ID:** 490-79645-1

**Client ID:** OB-20A-060115

Sample Date/Time: 06/01/2015 10:50      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-B-1 MS		490-254074		06/08/2015 12:18	1	TAL NSH	EML
A:8260C	490-79645-B-1 MS		490-254074		06/08/2015 12:18	1	TAL NSH	EML

**Lab ID:** 490-79645-1

**Client ID:** OB-20A-060115

Sample Date/Time: 06/01/2015 10:50      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-B-1 MSD		490-254074		06/08/2015 12:46	1	TAL NSH	EML
A:8260C	490-79645-B-1 MSD		490-254074		06/08/2015 12:46	1	TAL NSH	EML

**Lab ID:** 490-79645-2

**Client ID:** FB-01-060115

Sample Date/Time: 06/01/2015 11:20      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-2		490-254074		06/06/2015 06:07	1	TAL NSH	EML
A:8260C	490-79645-A-2		490-254074		06/06/2015 06:07	1	TAL NSH	EML

**Lab ID:** 490-79645-3

**Client ID:** OB-20B-060115

Sample Date/Time: 06/01/2015 12:20      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-3		490-254074		06/06/2015 06:35	1	TAL NSH	EML
A:8260C	490-79645-A-3		490-254074		06/06/2015 06:35	1	TAL NSH	EML

**Lab ID:** 490-79645-4

**Client ID:** DUP-01-060115

Sample Date/Time: 06/01/2015 00:00      Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-4		490-254074		06/06/2015 07:03	1	TAL NSH	EML
A:8260C	490-79645-A-4		490-254074		06/06/2015 07:03	1	TAL NSH	EML

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

**Lab ID:** 490-79645-5

**Client ID:** OB-27-060115

Sample Date/Time: 06/01/2015 13:45 Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-5		490-254074		06/06/2015 07:30	1	TAL NSH	EML
A:8260C	490-79645-A-5		490-254074		06/06/2015 07:30	1	TAL NSH	EML

**Lab ID:** 490-79645-6

**Client ID:** OB-11R-060115

Sample Date/Time: 06/01/2015 14:55 Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-6		490-254074		06/06/2015 07:58	1	TAL NSH	EML
A:8260C	490-79645-A-6		490-254074		06/06/2015 07:58	1	TAL NSH	EML

**Lab ID:** 490-79645-7

**Client ID:** SR-3-SEEP-060115

Sample Date/Time: 06/01/2015 14:05 Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-7		490-254379		06/08/2015 19:37	1	TAL NSH	EML
A:8260C	490-79645-A-7		490-254379		06/08/2015 19:37	1	TAL NSH	EML

**Lab ID:** 490-79645-8

**Client ID:** RW-6A-060115

Sample Date/Time: 06/01/2015 15:50 Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-8		490-254379		06/08/2015 20:05	1	TAL NSH	EML
A:8260C	490-79645-A-8		490-254379		06/08/2015 20:05	1	TAL NSH	EML

**Lab ID:** 490-79645-9

**Client ID:** Trip Blank

Sample Date/Time: 06/01/2015 00:00 Received Date/Time: 06/03/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79645-A-9		490-254074		06/06/2015 03:19	1	TAL NSH	EML
A:8260C	490-79645-A-9		490-254074		06/06/2015 03:19	1	TAL NSH	EML

**Lab ID:** 490-79781-1

**Client ID:** SC-01-060215

Sample Date/Time: 06/02/2015 09:45 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-1		490-253850		06/05/2015 16:04	1	TAL NSH	EML
A:8260C	490-79781-A-1		490-253850		06/05/2015 16:04	1	TAL NSH	EML

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

**Lab ID:** 490-79781-1 MS

**Client ID:** SC-01-060215

Sample Date/Time: 06/02/2015 09:45 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-B-1 MS		490-253850		06/05/2015 22:38	1	TAL NSH	EML
A:8260C	490-79781-B-1 MS		490-253850		06/05/2015 22:38	1	TAL NSH	EML

**Lab ID:** 490-79781-1 MSD

**Client ID:** SC-01-060215

Sample Date/Time: 06/02/2015 09:45 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-C-1 MSD		490-253850		06/05/2015 23:07	1	TAL NSH	EML
A:8260C	490-79781-C-1 MSD		490-253850		06/05/2015 23:07	1	TAL NSH	EML

**Lab ID:** 490-79781-2

**Client ID:** PMP-Pond-060215

Sample Date/Time: 06/02/2015 09:00 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-2		490-253850		06/05/2015 17:57	1	TAL NSH	EML
A:8260C	490-79781-A-2		490-253850		06/05/2015 17:57	1	TAL NSH	EML

**Lab ID:** 490-79781-3

**Client ID:** RW-6-060215

Sample Date/Time: 06/02/2015 10:50 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-3		490-253850		06/05/2015 18:25	1	TAL NSH	EML
A:8260C	490-79781-A-3		490-253850		06/05/2015 18:25	1	TAL NSH	EML

**Lab ID:** 490-79781-4

**Client ID:** PMP-50-060215

Sample Date/Time: 06/02/2015 13:05 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-4		490-253850		06/05/2015 18:53	1	TAL NSH	EML
A:8260C	490-79781-A-4		490-253850		06/05/2015 18:53	1	TAL NSH	EML

**Lab ID:** 490-79781-5

**Client ID:** PAB-00-060215

Sample Date/Time: 06/02/2015 15:45 Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-5		490-253850		06/05/2015 19:21	1	TAL NSH	EML
A:8260C	490-79781-A-5		490-253850		06/05/2015 19:21	1	TAL NSH	EML

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

**Lab ID:** 490-79781-6

**Client ID:** PAB-01-060215

Sample Date/Time: 06/02/2015 16:10      Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-6		490-253850		06/05/2015 19:49	1	TAL NSH	EML
A:8260C	490-79781-A-6		490-253850		06/05/2015 19:49	1	TAL NSH	EML

**Lab ID:** 490-79781-7

**Client ID:** PAB-02-060215

Sample Date/Time: 06/02/2015 16:20      Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-7		490-253850		06/05/2015 20:18	1	TAL NSH	EML
A:8260C	490-79781-A-7		490-253850		06/05/2015 20:18	1	TAL NSH	EML

**Lab ID:** 490-79781-8

**Client ID:** PMP-180-060315

Sample Date/Time: 06/03/2015 09:30      Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-8		490-253850		06/05/2015 20:46	1	TAL NSH	EML
A:8260C	490-79781-A-8		490-253850		06/05/2015 20:46	1	TAL NSH	EML

**Lab ID:** 490-79781-9

**Client ID:** PMP-230-060315

Sample Date/Time: 06/03/2015 10:45      Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-9		490-253850		06/05/2015 21:15	1	TAL NSH	EML
A:8260C	490-79781-A-9		490-253850		06/05/2015 21:15	1	TAL NSH	EML

**Lab ID:** 490-79781-10

**Client ID:** Trip Blank

Sample Date/Time: 06/02/2015 00:01      Received Date/Time: 06/04/2015 08:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79781-A-10		490-253850		06/05/2015 15:35	1	TAL NSH	EML
A:8260C	490-79781-A-10		490-253850		06/05/2015 15:35	1	TAL NSH	EML
P:5030C	490-79781-B-10		490-254379		06/08/2015 18:42	1	TAL NSH	EML
A:8260C	490-79781-B-10		490-254379		06/08/2015 18:42	1	TAL NSH	EML

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

**Lab ID:** MB

**Client ID:** N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	MB 490-253850/7		490-253850		06/05/2015 13:41	1	TAL NSH	EML
A:8260C	MB 490-253850/7		490-253850		06/05/2015 13:41	1	TAL NSH	EML
P:5030C	MB 490-254074/7		490-254074		06/06/2015 02:23	1	TAL NSH	EML
A:8260C	MB 490-254074/7		490-254074		06/06/2015 02:23	1	TAL NSH	EML
P:5030C	MB 490-254379/7		490-254379		06/08/2015 14:08	1	TAL NSH	EML
A:8260C	MB 490-254379/7		490-254379		06/08/2015 14:08	1	TAL NSH	EML

**Lab ID:** LCS

**Client ID:** N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCS 490-253850/3		490-253850		06/05/2015 11:48	1	TAL NSH	EML
A:8260C	LCS 490-253850/3		490-253850		06/05/2015 11:48	1	TAL NSH	EML
P:5030C	LCS 490-254074/3		490-254074		06/06/2015 00:31	1	TAL NSH	EML
A:8260C	LCS 490-254074/3		490-254074		06/06/2015 00:31	1	TAL NSH	EML
P:5030C	LCS 490-254379/3		490-254379		06/08/2015 11:23	1	TAL NSH	EML
A:8260C	LCS 490-254379/3		490-254379		06/08/2015 11:23	1	TAL NSH	EML

**Lab ID:** LCSD

**Client ID:** N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCSD 490-253850/4		490-253850		06/05/2015 12:16	1	TAL NSH	EML
A:8260C	LCSD 490-253850/4		490-253850		06/05/2015 12:16	1	TAL NSH	EML
P:5030C	LCSD 490-254074/4		490-254074		06/06/2015 00:59	1	TAL NSH	EML
A:8260C	LCSD 490-254074/4		490-254074		06/06/2015 00:59	1	TAL NSH	EML
P:5030C	LCSD 490-254379/4		490-254379		06/08/2015 11:51	1	TAL NSH	EML
A:8260C	LCSD 490-254379/4		490-254379		06/08/2015 11:51	1	TAL NSH	EML

**Lab ID:** MS

**Client ID:** N/A

Sample Date/Time: 05/28/2015 09:35      Received Date/Time: 06/02/2015 08:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79558-B-2 MS		490-254379		06/08/2015 21:54	1	TAL NSH	EML
A:8260C	490-79558-B-2 MS		490-254379		06/08/2015 21:54	1	TAL NSH	EML

# Quality Control Results

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

## Laboratory Chronicle

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 05/28/2015 09:35      Received Date/Time: 06/02/2015 08:45

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	490-79558-C-2 MSD		490-254379		06/08/2015 22:21	1	TAL NSH	EML
A:8260C	490-79558-C-2 MSD		490-254379		06/08/2015 22:21	1	TAL NSH	EML

### Lab References:

TAL NSH = TestAmerica Nashville

# **8260C\_DKQP**

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**Volatile Organic Compounds by GC/MS**

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low  
GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
OB-20A-060115	490-79645-1	94	98	103	111
FB-01-060115	490-79645-2	99	97	105	113
OB-20B-060115	490-79645-3	97	97	104	112
DUP-01-060115	490-79645-4	96	98	105	112
OB-27-060115	490-79645-5	95	97	105	114
OB-11R-060115	490-79645-6	97	98	104	114
SR-3-SEEP-060115	490-79645-7	97	93	107	113
RW-6A-060115	490-79645-8	97	95	106	113
Trip Blank	490-79645-9	98	101	107	113
SC-01-060215	490-79781-1	102	105	107	104
PMP-Pond-060215	490-79781-2	111	111	114	107
RW-6-060215	490-79781-3	99	98	117	113
PMP-50-060215	490-79781-4	104	105	114	108
PAB-00-060215	490-79781-5	100	103	120	108
PAB-01-060215	490-79781-6	102	105	115	105
PAB-02-060215	490-79781-7	101	104	112	106
PMP-180-060315	490-79781-8	98	99	115	109
PMP-230-060315	490-79781-9	102	108	111	112
Trip Blank	490-79781-10	102	105	113	114
Trip Blank	490-79781-10	98	96	104	110
	MB 490-253850/7	99	100	106	109
	MB 490-254074/7	96	97	110	111
	MB 490-254379/7	98	98	100	116
	LCS 490-253850/3	103	101	105	107
	LCS 490-254074/3	96	96	106	112
	LCS 490-254379/3	95	94	97	119
	LCSD 490-253850/4	100	100	104	108
	LCSD 490-254074/4	98	97	100	116
	LCSD 490-254379/4	94	95	95	119
OB-20A-060115 MS	490-79645-1 MS	95	95	96	117
SC-01-060215 MS	490-79781-1 MS	96	94	101	110
	490-79558-B-2 MS	95	93	96	118
OB-20A-060115 MSD	490-79645-1 MSD	94	94	96	118

QC LIMITS

DBFM = Dibromofluoromethane (Surrogate)	70-130
DCA = 1,2-Dichloroethane-d4 (Surrogate)	70-130
TOL = Toluene-d8 (Surrogate)	70-130
BFB = 4-Bromofluorobenzene (Surrogate)	70-130

# Column to be used to flag recovery values

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low  
GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SC-01-060215 MSD	490-79781-1 MSD	97	97	103	111
	490-79558-C-2 MSD	95	94	95	119

DBFM = Dibromofluoromethane (Surrogate)  
DCA = 1,2-Dichloroethane-d4 (Surrogate)  
TOL = Toluene-d8 (Surrogate)  
BFB = 4-Bromofluorobenzene (Surrogate)

QC LIMITS

70-130  
70-130  
70-130  
70-130

# Column to be used to flag recovery values

FORM II 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-03.D  
Lab ID: LCS 490-253850/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	250	219	87	40-160	
Benzene	50.0	50.2	100	70-130	
Bromoform	50.0	52.6	105	70-130	
Bromomethane	50.0	42.7	85	40-160	
2-Butanone (MEK)	250	251	101	40-160	
Carbon disulfide	50.0	45.2	90	40-160	
Carbon tetrachloride	50.0	47.7	95	70-130	
Chlorobenzene	50.0	49.6	99	70-130	
Chlorodibromomethane	50.0	52.9	106	70-130	
Chloroethane	50.0	50.3	101	40-160	
Chloroform	50.0	50.6	101	70-130	
Chloromethane	50.0	42.5	85	40-160	
cis-1,2-Dichloroethene	50.0	48.7	97	70-130	
cis-1,3-Dichloropropene	50.0	50.2	100	70-130	
Cyclohexane	50.0	50.0	100	70-130	
1,2-Dibromo-3-Chloropropane	50.0	51.1	102	40-160	
1,2-Dichlorobenzene	50.0	52.1	104	70-130	
1,3-Dichlorobenzene	50.0	52.7	105	70-130	
1,4-Dichlorobenzene	50.0	49.6	99	70-130	
Dichlorobromomethane	50.0	47.1	94	70-130	
Dichlorodifluoromethane	50.0	46.3	93	40-160	
1,1-Dichloroethane	50.0	47.1	94	70-130	
1,2-Dichloroethane	50.0	45.8	92	70-130	
1,1-Dichloroethene	50.0	46.2	92	70-130	
1,2-Dichloropropane	50.0	46.4	93	70-130	
Ethylbenzene	50.0	52.9	106	70-130	
1,2-Dibromoethane	50.0	50.8	102	70-130	
2-Hexanone	250	279	112	40-160	
Isopropylbenzene	50.0	54.8	110	70-130	
Methyl acetate	250	240	96	70-130	
Methylcyclohexane	50.0	47.4	95	70-130	
Methylene Chloride	50.0	49.0	98	70-130	
4-Methyl-2-pentanone (MIBK)	250	247	99	40-160	
Methyl tert-butyl ether	50.0	47.2	94	70-130	
Styrene	50.0	55.7	111	70-130	
1,1,2,2-Tetrachloroethane	50.0	50.2	100	70-130	
Tetrachloroethene	50.0	46.0	92	70-130	
Toluene	50.0	48.3	97	70-130	
trans-1,2-Dichloroethene	50.0	48.0	96	70-130	
trans-1,3-Dichloropropene	50.0	51.0	102	70-130	
1,2,4-Trichlorobenzene	50.0	55.0	110	70-130	
1,1,1-Trichloroethane	50.0	47.2	94	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060515-03.D

Lab ID: LCS 490-253850/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	46.6	93	70-130	
Trichloroethene	50.0	46.2	92	70-130	
Trichlorofluoromethane	50.0	45.3	91	40-160	
Freon-113	50.0	44.9	90	70-130	
Vinyl chloride	50.0	47.5	95	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-30.D  
Lab ID: LCS 490-254074/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	250	239	95	40-160	
Benzene	50.0	47.0	94	70-130	
Bromoform	50.0	52.9	106	70-130	
Bromomethane	50.0	41.8	84	40-160	
2-Butanone (MEK)	250	229	92	40-160	
Carbon disulfide	50.0	42.0	84	40-160	
Carbon tetrachloride	50.0	45.5	91	70-130	
Chlorobenzene	50.0	48.9	98	70-130	
Chlorodibromomethane	50.0	52.7	105	70-130	
Chloroethane	50.0	51.1	102	40-160	
Chloroform	50.0	47.2	94	70-130	
Chloromethane	50.0	44.8	90	40-160	
cis-1,2-Dichloroethene	50.0	44.4	89	70-130	
cis-1,3-Dichloropropene	50.0	50.6	101	70-130	
Cyclohexane	50.0	46.9	94	70-130	
1,2-Dibromo-3-Chloropropane	50.0	54.8	110	40-160	
1,2-Dichlorobenzene	50.0	51.1	102	70-130	
1,3-Dichlorobenzene	50.0	52.7	105	70-130	
1,4-Dichlorobenzene	50.0	49.1	98	70-130	
Dichlorobromomethane	50.0	46.7	93	70-130	
Dichlorodifluoromethane	50.0	46.3	93	40-160	
1,1-Dichloroethane	50.0	46.3	93	70-130	
1,2-Dichloroethane	50.0	44.2	88	70-130	
1,1-Dichloroethene	50.0	46.1	92	70-130	
1,2-Dichloropropane	50.0	47.1	94	70-130	
Ethylbenzene	50.0	51.8	104	70-130	
1,2-Dibromoethane	50.0	50.6	101	70-130	
2-Hexanone	250	268	107	40-160	
Isopropylbenzene	50.0	53.6	107	70-130	
Methyl acetate	250	236	94	70-130	
Methylcyclohexane	50.0	45.5	91	70-130	
Methylene Chloride	50.0	48.7	97	70-130	
4-Methyl-2-pentanone (MIBK)	250	254	102	40-160	
Methyl tert-butyl ether	50.0	46.3	93	70-130	
Styrene	50.0	55.0	110	70-130	
1,1,2,2-Tetrachloroethane	50.0	49.9	100	70-130	
Tetrachloroethene	50.0	43.5	87	70-130	
Toluene	50.0	47.8	96	70-130	
trans-1,2-Dichloroethene	50.0	46.3	93	70-130	
trans-1,3-Dichloropropene	50.0	49.6	99	70-130	
1,2,4-Trichlorobenzene	50.0	54.0	108	70-130	
1,1,1-Trichloroethane	50.0	45.2	90	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060515-30.D

Lab ID: LCS 490-254074/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	44.4	89	70-130	
Trichloroethene	50.0	46.1	92	70-130	
Trichlorofluoromethane	50.0	44.6	89	40-160	
Freon-113	50.0	44.2	88	70-130	
Vinyl chloride	50.0	49.1	98	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-03.D  
Lab ID: LCS 490-254379/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	250	243	97	40-160	
Benzene	50.0	48.9	98	70-130	
Bromoform	50.0	49.9	100	70-130	
Bromomethane	50.0	41.0	82	40-160	
2-Butanone (MEK)	250	230	92	40-160	
Carbon disulfide	50.0	48.4	97	40-160	
Carbon tetrachloride	50.0	44.7	89	70-130	
Chlorobenzene	50.0	49.9	100	70-130	
Chlorodibromomethane	50.0	52.3	105	70-130	
Chloroethane	50.0	56.1	112	40-160	
Chloroform	50.0	48.0	96	70-130	
Chloromethane	50.0	54.2	108	40-160	
cis-1,2-Dichloroethene	50.0	47.6	95	70-130	
cis-1,3-Dichloropropene	50.0	48.1	96	70-130	
Cyclohexane	50.0	49.4	99	70-130	
1,2-Dibromo-3-Chloropropane	50.0	52.3	105	40-160	
1,2-Dichlorobenzene	50.0	50.9	102	70-130	
1,3-Dichlorobenzene	50.0	53.5	107	70-130	
1,4-Dichlorobenzene	50.0	49.9	100	70-130	
Dichlorobromomethane	50.0	46.5	93	70-130	
Dichlorodifluoromethane	50.0	52.5	105	40-160	
1,1-Dichloroethane	50.0	49.9	100	70-130	
1,2-Dichloroethane	50.0	43.0	86	70-130	
1,1-Dichloroethene	50.0	49.8	100	70-130	
1,2-Dichloropropane	50.0	47.9	96	70-130	
Ethylbenzene	50.0	54.1	108	70-130	
1,2-Dibromoethane	50.0	50.4	101	70-130	
2-Hexanone	250	275	110	40-160	
Isopropylbenzene	50.0	54.4	109	70-130	
Methyl acetate	250	239	96	70-130	
Methylcyclohexane	50.0	46.7	93	70-130	
Methylene Chloride	50.0	52.0	104	70-130	
4-Methyl-2-pentanone (MIBK)	250	225	90	40-160	
Methyl tert-butyl ether	50.0	46.7	93	70-130	
Styrene	50.0	55.1	110	70-130	
1,1,2,2-Tetrachloroethane	50.0	51.9	104	70-130	
Tetrachloroethene	50.0	41.8	84	70-130	
Toluene	50.0	45.1	90	70-130	
trans-1,2-Dichloroethene	50.0	50.2	100	70-130	
trans-1,3-Dichloropropene	50.0	47.1	94	70-130	
1,2,4-Trichlorobenzene	50.0	53.1	106	70-130	
1,1,1-Trichloroethane	50.0	44.8	90	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060815-03.D

Lab ID: LCS 490-254379/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	41.9	84	70-130	
Trichloroethene	50.0	45.8	92	70-130	
Trichlorofluoromethane	50.0	46.7	93	40-160	
Freon-113	50.0	46.7	93	70-130	
Vinyl chloride	50.0	57.8	116	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-04.D  
Lab ID: LCSD 490-253850/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	232	93	6	20	40-160	
Benzene	50.0	48.2	96	4	20	70-130	
Bromoform	50.0	52.4	105	0	20	70-130	
Bromomethane	50.0	44.0	88	3	20	40-160	
2-Butanone (MEK)	250	251	100	0	20	40-160	
Carbon disulfide	50.0	43.6	87	4	20	40-160	
Carbon tetrachloride	50.0	47.2	94	1	20	70-130	
Chlorobenzene	50.0	49.5	99	0	20	70-130	
Chlorodibromomethane	50.0	53.0	106	0	20	70-130	
Chloroethane	50.0	51.3	103	2	20	40-160	
Chloroform	50.0	49.7	99	2	20	70-130	
Chloromethane	50.0	45.0	90	6	20	40-160	
cis-1,2-Dichloroethene	50.0	47.6	95	2	20	70-130	
cis-1,3-Dichloropropene	50.0	50.5	101	1	20	70-130	
Cyclohexane	50.0	47.0	94	6	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	52.1	104	2	20	40-160	
1,2-Dichlorobenzene	50.0	51.0	102	2	20	70-130	
1,3-Dichlorobenzene	50.0	52.6	105	0	20	70-130	
1,4-Dichlorobenzene	50.0	49.4	99	0	20	70-130	
Dichlorobromomethane	50.0	48.2	96	2	20	70-130	
Dichlorodifluoromethane	50.0	46.5	93	0	20	40-160	
1,1-Dichloroethane	50.0	48.6	97	3	20	70-130	
1,2-Dichloroethane	50.0	45.3	91	1	20	70-130	
1,1-Dichloroethene	50.0	46.0	92	0	20	70-130	
1,2-Dichloropropane	50.0	46.8	94	1	20	70-130	
Ethylbenzene	50.0	52.7	105	0	20	70-130	
1,2-Dibromoethane	50.0	50.7	101	0	20	70-130	
2-Hexanone	250	280	112	0	20	40-160	
Isopropylbenzene	50.0	54.0	108	1	20	70-130	
Methyl acetate	250	239	96	0	20	70-130	
Methylcyclohexane	50.0	47.3	95	0	20	70-130	
Methylene Chloride	50.0	50.2	100	2	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	247	99	0	20	40-160	
Methyl tert-butyl ether	50.0	48.0	96	2	20	70-130	
Styrene	50.0	55.0	110	1	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	50.2	100	0	20	70-130	
Tetrachloroethene	50.0	45.8	92	0	20	70-130	
Toluene	50.0	48.0	96	0	20	70-130	
trans-1,2-Dichloroethene	50.0	48.4	97	1	20	70-130	
trans-1,3-Dichloropropene	50.0	51.0	102	0	20	70-130	
1,2,4-Trichlorobenzene	50.0	54.7	109	1	20	70-130	
1,1,1-Trichloroethane	50.0	45.9	92	3	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-04.D  
Lab ID: LCSD 490-253850/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	46.9	94	1	20	70-130	
Trichloroethene	50.0	46.7	93	1	20	70-130	
Trichlorofluoromethane	50.0	45.8	92	1	20	40-160	
Freon-113	50.0	44.9	90	0	20	70-130	
Vinyl chloride	50.0	48.5	97	2	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-31.D  
Lab ID: LCSD 490-254074/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	239	96	0	20	40-160	
Benzene	50.0	47.5	95	1	20	70-130	
Bromoform	50.0	50.9	102	4	20	70-130	
Bromomethane	50.0	41.3	83	1	20	40-160	
2-Butanone (MEK)	250	233	93	2	20	40-160	
Carbon disulfide	50.0	42.0	84	0	20	40-160	
Carbon tetrachloride	50.0	45.3	91	0	20	70-130	
Chlorobenzene	50.0	48.6	97	1	20	70-130	
Chlorodibromomethane	50.0	51.6	103	2	20	70-130	
Chloroethane	50.0	49.8	100	3	20	40-160	
Chloroform	50.0	46.9	94	1	20	70-130	
Chloromethane	50.0	43.3	87	4	20	40-160	
cis-1,2-Dichloroethene	50.0	44.2	88	0	20	70-130	
cis-1,3-Dichloropropene	50.0	46.8	94	8	20	70-130	
Cyclohexane	50.0	45.9	92	2	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	53.3	107	3	20	40-160	
1,2-Dichlorobenzene	50.0	49.2	98	4	20	70-130	
1,3-Dichlorobenzene	50.0	51.6	103	2	20	70-130	
1,4-Dichlorobenzene	50.0	48.1	96	2	20	70-130	
Dichlorobromomethane	50.0	46.9	94	0	20	70-130	
Dichlorodifluoromethane	50.0	45.6	91	2	20	40-160	
1,1-Dichloroethane	50.0	45.8	92	1	20	70-130	
1,2-Dichloroethane	50.0	44.2	88	0	20	70-130	
1,1-Dichloroethene	50.0	45.4	91	2	20	70-130	
1,2-Dichloropropane	50.0	47.6	95	1	20	70-130	
Ethylbenzene	50.0	51.8	104	0	20	70-130	
1,2-Dibromoethane	50.0	49.9	100	1	20	70-130	
2-Hexanone	250	279	112	4	20	40-160	
Isopropylbenzene	50.0	52.8	106	2	20	70-130	
Methyl acetate	250	231	93	2	20	70-130	
Methylcyclohexane	50.0	46.0	92	1	20	70-130	
Methylene Chloride	50.0	48.3	97	1	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	235	94	8	20	40-160	
Methyl tert-butyl ether	50.0	45.9	92	1	20	70-130	
Styrene	50.0	53.9	108	2	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	50.8	102	2	20	70-130	
Tetrachloroethene	50.0	40.8	82	6	20	70-130	
Toluene	50.0	44.2	88	8	20	70-130	
trans-1,2-Dichloroethene	50.0	46.3	93	0	20	70-130	
trans-1,3-Dichloropropene	50.0	46.5	93	6	20	70-130	
1,2,4-Trichlorobenzene	50.0	52.8	106	2	20	70-130	
1,1,1-Trichloroethane	50.0	44.9	90	1	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-31.D  
Lab ID: LCSD 490-254074/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	42.7	85	4	20	70-130	
Trichloroethene	50.0	46.1	92	0	20	70-130	
Trichlorofluoromethane	50.0	43.7	87	2	20	40-160	
Freon-113	50.0	43.8	88	1	20	70-130	
Vinyl chloride	50.0	48.4	97	1	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-04.D  
Lab ID: LCSD 490-254379/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	246	98	1	20	40-160	
Benzene	50.0	47.5	95	3	20	70-130	
Bromoform	50.0	49.8	100	0	20	70-130	
Bromomethane	50.0	39.9	80	3	20	40-160	
2-Butanone (MEK)	250	241	96	5	20	40-160	
Carbon disulfide	50.0	46.6	93	4	20	40-160	
Carbon tetrachloride	50.0	43.3	87	3	20	70-130	
Chlorobenzene	50.0	48.8	98	2	20	70-130	
Chlorodibromomethane	50.0	51.8	104	1	20	70-130	
Chloroethane	50.0	54.3	109	3	20	40-160	
Chloroform	50.0	46.7	93	3	20	70-130	
Chloromethane	50.0	53.6	107	1	20	40-160	
cis-1,2-Dichloroethene	50.0	46.0	92	3	20	70-130	
cis-1,3-Dichloropropene	50.0	46.3	93	4	20	70-130	
Cyclohexane	50.0	47.5	95	4	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	53.5	107	2	20	40-160	
1,2-Dichlorobenzene	50.0	50.6	101	1	20	70-130	
1,3-Dichlorobenzene	50.0	52.8	106	1	20	70-130	
1,4-Dichlorobenzene	50.0	49.4	99	1	20	70-130	
Dichlorobromomethane	50.0	45.8	92	2	20	70-130	
Dichlorodifluoromethane	50.0	50.5	101	4	20	40-160	
1,1-Dichloroethane	50.0	48.3	97	3	20	70-130	
1,2-Dichloroethane	50.0	43.0	86	0	20	70-130	
1,1-Dichloroethene	50.0	48.2	96	3	20	70-130	
1,2-Dichloropropane	50.0	47.3	95	1	20	70-130	
Ethylbenzene	50.0	52.7	105	3	20	70-130	
1,2-Dibromoethane	50.0	50.1	100	1	20	70-130	
2-Hexanone	250	278	111	1	20	40-160	
Isopropylbenzene	50.0	53.1	106	2	20	70-130	
Methyl acetate	250	237	95	1	20	70-130	
Methylcyclohexane	50.0	45.7	91	2	20	70-130	
Methylene Chloride	50.0	51.2	102	1	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	227	91	1	20	40-160	
Methyl tert-butyl ether	50.0	47.1	94	1	20	70-130	
Styrene	50.0	54.0	108	2	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	52.6	105	1	20	70-130	
Tetrachloroethene	50.0	39.9	80	5	20	70-130	
Toluene	50.0	42.9	86	5	20	70-130	
trans-1,2-Dichloroethene	50.0	49.0	98	2	20	70-130	
trans-1,3-Dichloropropene	50.0	46.3	93	2	20	70-130	
1,2,4-Trichlorobenzene	50.0	53.8	108	1	20	70-130	
1,1,1-Trichloroethane	50.0	43.6	87	3	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-04.D  
Lab ID: LCSD 490-254379/4 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	41.6	83	1	20	70-130	
Trichloroethene	50.0	44.6	89	3	20	70-130	
Trichlorofluoromethane	50.0	44.9	90	4	20	40-160	
Freon-113	50.0	45.2	90	3	20	70-130	
Vinyl chloride	50.0	56.1	112	3	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-05.D  
Lab ID: 490-79645-1 MS Client ID: OB-20A-060115 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	250	2.7 U	228	91	40-160	
Benzene	50.0	0.20 U	49.2	98	70-130	
Bromoform	50.0	0.29 U	48.6	97	70-130	
Bromomethane	50.0	0.35 U	42.0	84	40-160	
2-Butanone (MEK)	250	2.6 U	225	90	70-130	
Carbon disulfide	50.0	0.22 U	49.8	100	40-160	
Carbon tetrachloride	50.0	0.18 U	46.8	94	70-130	
Chlorobenzene	50.0	0.18 U	49.6	99	70-130	
Chlorodibromomethane	50.0	0.25 U	50.9	102	70-130	
Chloroethane	50.0	0.36 U	57.0	114	40-160	
Chloroform	50.0	0.23 U	47.6	95	70-130	
Chloromethane	50.0	0.36 U	53.9	108	40-160	
cis-1,2-Dichloroethene	50.0	0.21 U	48.2	96	70-130	
cis-1,3-Dichloropropene	50.0	0.17 U	46.6	93	70-130	
Cyclohexane	50.0	0.13 U	53.7	107	70-130	
1,2-Dibromo-3-Chloropropane	50.0	0.94 U	49.2	98	40-160	
1,2-Dichlorobenzene	50.0	0.19 U	51.0	102	70-130	
1,3-Dichlorobenzene	50.0	0.18 U	53.1	106	70-130	
1,4-Dichlorobenzene	50.0	0.17 U	49.1	98	70-130	
Dichlorobromomethane	50.0	0.17 U	46.1	92	70-130	
Dichlorodifluoromethane	50.0	0.17 U	55.1	110	40-160	
1,1-Dichloroethane	50.0	0.24 U	50.0	100	70-130	
1,2-Dichloroethane	50.0	0.20 U	43.0	86	70-130	
1,1-Dichloroethene	50.0	0.25 U	51.7	103	70-130	
1,2-Dichloropropane	50.0	0.25 U	47.8	96	70-130	
Ethylbenzene	50.0	0.19 U	54.6	109	70-130	
1,2-Dibromoethane	50.0	0.21 U	49.2	98	70-130	
2-Hexanone	250	1.3 U	270	108	40-160	
Isopropylbenzene	50.0	0.33 U	55.7	111	70-130	
Methyl acetate	250	0.58 U	229	92	70-130	
Methylcyclohexane	50.0	0.090 U	51.8	104	70-130	
Methylene Chloride	50.0	0.22 U	52.5	105	70-130	
4-Methyl-2-pentanone (MIBK)	250	0.81 U	217	87	40-160	
Methyl tert-butyl ether	50.0	0.17 U	46.1	92	70-130	
Styrene	50.0	0.28 U	54.9	110	70-130	
1,1,2,2-Tetrachloroethane	50.0	0.19 U	50.4	101	70-130	
Tetrachloroethene	50.0	0.14 U	42.1	84	70-130	
Toluene	50.0	0.17 U	44.4	89	70-130	
trans-1,2-Dichloroethene	50.0	0.23 U	51.3	103	70-130	
trans-1,3-Dichloropropene	50.0	0.17 U	46.0	92	70-130	
1,2,4-Trichlorobenzene	50.0	0.20 U	54.2	108	70-130	
1,1,1-Trichloroethane	50.0	0.19 U	46.1	92	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-05.D  
Lab ID: 490-79645-1 MS Client ID: OB-20A-060115 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	0.19 U	40.7	81	70-130	
Trichloroethene	50.0	0.20 U	46.5	93	70-130	
Trichlorofluoromethane	50.0	0.21 U	49.6	99	40-160	
Freon-113	50.0	0.15 U	50.6	101	70-130	
Vinyl chloride	50.0	0.18 U	60.0	120	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Matrix: Water Level: Low Lab File ID: 060515-26.D  
Lab ID: 490-79781-1 MS Client ID: SC-01-060215 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	250	2.7 U	213	85	40-160	
Benzene	50.0	1.6	47.9	93	70-130	
Bromoform	50.0	0.29 U	49.2	98	70-130	
Bromomethane	50.0	0.35 U	28.2	56	40-160	
2-Butanone (MEK)	250	2.6 U	220	88	70-130	
Carbon disulfide	50.0	0.22 U	44.3	89	40-160	
Carbon tetrachloride	50.0	0.18 U	46.4	93	70-130	
Chlorobenzene	50.0	0.27 J	48.5	96	70-130	
Chlorodibromomethane	50.0	0.25 U	51.1	102	70-130	
Chloroethane	50.0	1.1	49.9	98	40-160	
Chloroform	50.0	0.23 U	46.5	93	70-130	
Chloromethane	50.0	0.36 U	41.7	83	40-160	
cis-1,2-Dichloroethene	50.0	0.21 U	45.2	90	70-130	
cis-1,3-Dichloropropene	50.0	0.17 U	47.7	95	70-130	
Cyclohexane	50.0	1.7	48.3	93	70-130	
1,2-Dibromo-3-Chloropropane	50.0	0.94 U	50.6	101	40-160	
1,2-Dichlorobenzene	50.0	0.19 U	50.1	100	70-130	
1,3-Dichlorobenzene	50.0	0.18 U	50.8	102	70-130	
1,4-Dichlorobenzene	50.0	0.17 U	47.9	96	70-130	
Dichlorobromomethane	50.0	0.17 U	44.7	89	70-130	
Dichlorodifluoromethane	50.0	0.70	40.6	80	40-160	
1,1-Dichloroethane	50.0	0.24 U	46.3	93	70-130	
1,2-Dichloroethane	50.0	0.20 U	42.3	85	70-130	
1,1-Dichloroethene	50.0	0.25 U	46.7	93	70-130	
1,2-Dichloropropane	50.0	0.25 U	45.2	90	70-130	
Ethylbenzene	50.0	0.76	53.0	104	70-130	
1,2-Dibromoethane	50.0	0.21 U	48.5	97	70-130	
2-Hexanone	250	1.3 U	252	101	40-160	
Isopropylbenzene	50.0	1.3	55.4	108	70-130	
Methyl acetate	250	0.58 U	217	87	70-130	
Methylcyclohexane	50.0	1.2	46.0	90	70-130	
Methylene Chloride	50.0	0.22 U	47.6	95	70-130	
4-Methyl-2-pentanone (MIBK)	250	0.81 U	236	94	40-160	
Methyl tert-butyl ether	50.0	0.17 U	44.4	89	70-130	
Styrene	50.0	0.28 U	53.6	107	70-130	
1,1,2,2-Tetrachloroethane	50.0	0.19 U	47.9	96	70-130	
Tetrachloroethene	50.0	0.14 U	44.4	89	70-130	
Toluene	50.0	0.76	46.6	92	70-130	
trans-1,2-Dichloroethene	50.0	0.23 U	46.8	94	70-130	
trans-1,3-Dichloropropene	50.0	0.17 U	47.5	95	70-130	
1,2,4-Trichlorobenzene	50.0	0.20 U	50.9	102	70-130	
1,1,1-Trichloroethane	50.0	0.19 U	45.2	90	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060515-26.D  
Lab ID: 490-79781-1 MS Client ID: SC-01-060215 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	0.19 U	44.1	88	70-130	
Trichloroethene	50.0	0.20 U	45.9	92	70-130	
Trichlorofluoromethane	50.0	0.21 U	44.1	88	40-160	
Freon-113	50.0	0.15 U	43.1	86	70-130	
Vinyl chloride	50.0	0.18 U	49.2	98	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-26.D  
Lab ID: 490-79558-B-2 MS Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	250	1.93	247	99	40-160	
Benzene	50.0	0.405	50.8	101	70-130	
Bromoform	50.0	0.000	49.6	99	70-130	
Bromomethane	50.0	0.000	26.1	52	40-160	
2-Butanone (MEK)	250	0.783	237	95	70-130	
Carbon disulfide	50.0	0.000	49.7	99	40-160	
Carbon tetrachloride	50.0	0.000	46.9	94	70-130	
Chlorobenzene	50.0	0.000	51.5	103	70-130	
Chlorodibromomethane	50.0	0.000	52.5	105	70-130	
Chloroethane	50.0	0.000	58.1	116	40-160	
Chloroform	50.0	0.000	49.2	98	70-130	
Chloromethane	50.0	0.000	53.3	107	40-160	
cis-1,2-Dichloroethene	50.0	0.000	48.4	97	70-130	
cis-1,3-Dichloropropene	50.0	0.000	48.1	96	70-130	
Cyclohexane	50.0	2.38	55.9	107	70-130	
1,2-Dibromo-3-Chloropropane	50.0	0.000	53.3	107	40-160	
1,2-Dichlorobenzene	50.0	0.000	52.3	105	70-130	
1,3-Dichlorobenzene	50.0	0.000	54.2	108	70-130	
1,4-Dichlorobenzene	50.0	0.000	50.1	100	70-130	
Dichlorobromomethane	50.0	0.000	47.4	95	70-130	
Dichlorodifluoromethane	50.0	0.000	52.1	104	40-160	
1,1-Dichloroethane	50.0	0.000	50.7	101	70-130	
1,2-Dichloroethane	50.0	0.000	44.2	88	70-130	
1,1-Dichloroethene	50.0	0.000	52.8	106	70-130	
1,2-Dichloropropane	50.0	0.000	48.4	97	70-130	
Ethylbenzene	50.0	4.17	60.4	112	70-130	
1,2-Dibromoethane	50.0	0.000	51.0	102	70-130	
2-Hexanone	250	0.000	287	115	40-160	
Isopropylbenzene	50.0	1.87	59.1	114	70-130	
Methyl acetate	250	0.000	232	93	70-130	
Methylcyclohexane	50.0	1.83	53.9	104	70-130	
Methylene Chloride	50.0	0.000	54.1	108	70-130	
4-Methyl-2-pentanone (MIBK)	250	0.000	231	92	40-160	
Methyl tert-butyl ether	50.0	0.000	47.6	95	70-130	
Styrene	50.0	0.000	56.9	114	70-130	
1,1,2,2-Tetrachloroethane	50.0	0.000	53.1	106	70-130	
Tetrachloroethene	50.0	0.000	43.7	87	70-130	
Toluene	50.0	0.113	46.1	92	70-130	
trans-1,2-Dichloroethene	50.0	0.000	51.3	103	70-130	
trans-1,3-Dichloropropene	50.0	0.000	47.3	95	70-130	
1,2,4-Trichlorobenzene	50.0	0.000	54.3	109	70-130	
1,1,1-Trichloroethane	50.0	0.000	46.7	93	70-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 060815-26.D  
Lab ID: 490-79558-B-2 MS Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,2-Trichloroethane	50.0	0.000	43.0	86	70-130	
Trichloroethene	50.0	0.000	48.2	96	70-130	
Trichlorofluoromethane	50.0	0.000	49.5	99	40-160	
Freon-113	50.0	0.000	50.6	101	70-130	
Vinyl chloride	50.0	0.000	59.8	120	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060815-06.D

Lab ID: 490-79645-1 MSD Client ID: OB-20A-060115 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	230	92	1	20	40-160	
Benzene	50.0	49.5	99	1	20	70-130	
Bromoform	50.0	48.9	98	1	20	70-130	
Bromomethane	50.0	43.4	87	3	20	40-160	
2-Butanone (MEK)	250	227	91	1	20	70-130	
Carbon disulfide	50.0	50.9	102	2	20	40-160	
Carbon tetrachloride	50.0	47.1	94	1	20	70-130	
Chlorobenzene	50.0	50.4	101	2	20	70-130	
Chlorodibromomethane	50.0	51.4	103	1	20	70-130	
Chloroethane	50.0	58.1	116	2	20	40-160	
Chloroform	50.0	48.1	96	1	20	70-130	
Chloromethane	50.0	55.9	112	4	20	40-160	
cis-1,2-Dichloroethene	50.0	47.9	96	1	20	70-130	
cis-1,3-Dichloropropene	50.0	47.7	95	2	20	70-130	
Cyclohexane	50.0	53.4	107	1	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	51.1	102	4	20	40-160	
1,2-Dichlorobenzene	50.0	51.3	103	1	20	70-130	
1,3-Dichlorobenzene	50.0	54.0	108	2	20	70-130	
1,4-Dichlorobenzene	50.0	49.7	99	1	20	70-130	
Dichlorobromomethane	50.0	46.5	93	1	20	70-130	
Dichlorodifluoromethane	50.0	55.7	111	1	20	40-160	
1,1-Dichloroethane	50.0	50.6	101	1	20	70-130	
1,2-Dichloroethane	50.0	43.3	87	1	20	70-130	
1,1-Dichloroethene	50.0	52.2	104	1	20	70-130	
1,2-Dichloropropane	50.0	48.2	96	1	20	70-130	
Ethylbenzene	50.0	55.6	111	2	20	70-130	
1,2-Dibromoethane	50.0	49.6	99	1	20	70-130	
2-Hexanone	250	270	108	0	20	40-160	
Isopropylbenzene	50.0	56.5	113	1	20	70-130	
Methyl acetate	250	229	92	0	20	70-130	
Methylcyclohexane	50.0	51.8	104	0	20	70-130	
Methylene Chloride	50.0	52.3	105	0	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	220	88	2	20	40-160	
Methyl tert-butyl ether	50.0	46.4	93	1	20	70-130	
Styrene	50.0	55.8	112	2	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	51.2	102	1	20	70-130	
Tetrachloroethene	50.0	43.1	86	2	20	70-130	
Toluene	50.0	44.7	89	1	20	70-130	
trans-1,2-Dichloroethene	50.0	51.8	104	1	20	70-130	
trans-1,3-Dichloropropene	50.0	46.2	92	1	20	70-130	
1,2,4-Trichlorobenzene	50.0	55.0	110	2	20	70-130	
1,1,1-Trichloroethane	50.0	46.3	93	0	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060815-06.D

Lab ID: 490-79645-1 MSD Client ID: OB-20A-060115 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	41.2	82	1	20	70-130	
Trichloroethene	50.0	47.1	94	1	20	70-130	
Trichlorofluoromethane	50.0	50.2	100	1	20	40-160	
Freon-113	50.0	50.6	101	0	20	70-130	
Vinyl chloride	50.0	61.0	122	2	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060515-27.D

Lab ID: 490-79781-1 MSD Client ID: SC-01-060215 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	217	87	2	20	40-160	
Benzene	50.0	49.7	96	4	20	70-130	
Bromoform	50.0	52.0	104	5	20	70-130	
Bromomethane	50.0	34.7	69	21	20	40-160	F2
2-Butanone (MEK)	250	231	92	5	20	70-130	
Carbon disulfide	50.0	44.9	90	1	20	40-160	
Carbon tetrachloride	50.0	47.4	95	2	20	70-130	
Chlorobenzene	50.0	49.5	99	2	20	70-130	
Chlorodibromomethane	50.0	52.9	106	3	20	70-130	
Chloroethane	50.0	51.8	101	4	20	40-160	
Chloroform	50.0	47.6	95	3	20	70-130	
Chloromethane	50.0	43.0	86	3	20	40-160	
cis-1,2-Dichloroethene	50.0	45.7	91	1	20	70-130	
cis-1,3-Dichloropropene	50.0	50.9	102	6	20	70-130	
Cyclohexane	50.0	49.5	96	3	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	54.6	109	8	20	40-160	
1,2-Dichlorobenzene	50.0	51.3	103	2	20	70-130	
1,3-Dichlorobenzene	50.0	52.7	105	4	20	70-130	
1,4-Dichlorobenzene	50.0	48.6	97	1	20	70-130	
Dichlorobromomethane	50.0	46.8	94	5	20	70-130	
Dichlorodifluoromethane	50.0	41.2	81	2	20	40-160	
1,1-Dichloroethane	50.0	46.6	93	1	20	70-130	
1,2-Dichloroethane	50.0	44.1	88	4	20	70-130	
1,1-Dichloroethene	50.0	48.1	96	3	20	70-130	
1,2-Dichloropropane	50.0	47.7	95	5	20	70-130	
Ethylbenzene	50.0	53.7	106	1	20	70-130	
1,2-Dibromoethane	50.0	49.8	100	3	20	70-130	
2-Hexanone	250	269	108	6	20	40-160	
Isopropylbenzene	50.0	57.0	111	3	20	70-130	
Methyl acetate	250	223	89	3	20	70-130	
Methylcyclohexane	50.0	48.0	94	4	20	70-130	
Methylene Chloride	50.0	49.2	98	3	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	251	100	6	20	40-160	
Methyl tert-butyl ether	50.0	46.0	92	4	20	70-130	
Styrene	50.0	54.9	110	2	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	50.3	101	5	20	70-130	
Tetrachloroethene	50.0	44.7	89	1	20	70-130	
Toluene	50.0	46.9	92	1	20	70-130	
trans-1,2-Dichloroethene	50.0	47.2	94	1	20	70-130	
trans-1,3-Dichloropropene	50.0	49.0	98	3	20	70-130	
1,2,4-Trichlorobenzene	50.0	53.5	107	5	20	70-130	
1,1,1-Trichloroethane	50.0	46.2	92	2	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060515-27.D

Lab ID: 490-79781-1 MSD Client ID: SC-01-060215 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	44.5	89	1	20	70-130	
Trichloroethene	50.0	47.5	95	3	20	70-130	
Trichlorofluoromethane	50.0	45.1	90	2	20	40-160	
Freon-113	50.0	43.9	88	2	20	70-130	
Vinyl chloride	50.0	51.2	102	4	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060815-27.D

Lab ID: 490-79558-C-2 MSD Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	250	255	102	3	20	40-160	
Benzene	50.0	50.3	100	1	20	70-130	
Bromoform	50.0	49.2	98	1	20	70-130	
Bromomethane	50.0	33.8	68	26	20	40-160	F2
2-Butanone (MEK)	250	234	94	1	20	70-130	
Carbon disulfide	50.0	49.2	98	1	20	40-160	
Carbon tetrachloride	50.0	46.7	93	0	20	70-130	
Chlorobenzene	50.0	50.4	101	2	20	70-130	
Chlorodibromomethane	50.0	51.8	104	1	20	70-130	
Chloroethane	50.0	57.9	116	0	20	40-160	
Chloroform	50.0	48.7	97	1	20	70-130	
Chloromethane	50.0	52.6	105	1	20	40-160	
cis-1,2-Dichloroethene	50.0	47.7	95	1	20	70-130	
cis-1,3-Dichloropropene	50.0	47.3	95	2	20	70-130	
Cyclohexane	50.0	55.8	107	0	20	70-130	
1,2-Dibromo-3-Chloropropane	50.0	52.8	106	1	20	40-160	
1,2-Dichlorobenzene	50.0	51.9	104	1	20	70-130	
1,3-Dichlorobenzene	50.0	54.0	108	0	20	70-130	
1,4-Dichlorobenzene	50.0	50.9	102	1	20	70-130	
Dichlorobromomethane	50.0	46.9	94	1	20	70-130	
Dichlorodifluoromethane	50.0	51.5	103	1	20	40-160	
1,1-Dichloroethane	50.0	50.2	100	1	20	70-130	
1,2-Dichloroethane	50.0	43.1	86	3	20	70-130	
1,1-Dichloroethene	50.0	52.6	105	0	20	70-130	
1,2-Dichloropropane	50.0	48.4	97	0	20	70-130	
Ethylbenzene	50.0	59.4	110	2	20	70-130	
1,2-Dibromoethane	50.0	49.9	100	2	20	70-130	
2-Hexanone	250	277	111	3	20	40-160	
Isopropylbenzene	50.0	58.4	113	1	20	70-130	
Methyl acetate	250	228	91	2	20	70-130	
Methylcyclohexane	50.0	53.2	103	1	20	70-130	
Methylene Chloride	50.0	53.9	108	0	20	70-130	
4-Methyl-2-pentanone (MIBK)	250	226	90	2	20	40-160	
Methyl tert-butyl ether	50.0	47.1	94	1	20	70-130	
Styrene	50.0	55.9	112	2	20	70-130	
1,1,2,2-Tetrachloroethane	50.0	52.3	105	2	20	70-130	
Tetrachloroethene	50.0	43.0	86	2	20	70-130	
Toluene	50.0	45.5	91	1	20	70-130	
trans-1,2-Dichloroethene	50.0	51.3	103	0	20	70-130	
trans-1,3-Dichloropropene	50.0	46.3	93	2	20	70-130	
1,2,4-Trichlorobenzene	50.0	54.2	108	0	20	70-130	
1,1,1-Trichloroethane	50.0	46.4	93	1	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 060815-27.D

Lab ID: 490-79558-C-2 MSD Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,2-Trichloroethane	50.0	42.7	85	1	20	70-130	
Trichloroethene	50.0	47.5	95	2	20	70-130	
Trichlorofluoromethane	50.0	48.5	97	2	20	40-160	
Freon-113	50.0	50.2	100	1	20	70-130	
Vinyl chloride	50.0	59.4	119	1	20	70-130	

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 060515-07.D Lab Sample ID: MB 490-253850/7  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: HP32 Date Analyzed: 06/05/2015 13:41  
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 490-253850/3	060515-03.D	06/05/2015 11:48
	LCSD 490-253850/4	060515-04.D	06/05/2015 12:16
Trip Blank	490-79781-10	060515-11.D	06/05/2015 15:35
SC-01-060215	490-79781-1	060515-12.D	06/05/2015 16:04
PMP-Pond-060215	490-79781-2	060515-16.D	06/05/2015 17:57
RW-6-060215	490-79781-3	060515-17.D	06/05/2015 18:25
PMP-50-060215	490-79781-4	060515-18.D	06/05/2015 18:53
PAB-00-060215	490-79781-5	060515-19.D	06/05/2015 19:21
PAB-01-060215	490-79781-6	060515-20.D	06/05/2015 19:49
PAB-02-060215	490-79781-7	060515-21.D	06/05/2015 20:18
PMP-180-060315	490-79781-8	060515-22.D	06/05/2015 20:46
PMP-230-060315	490-79781-9	060515-23.D	06/05/2015 21:15
SC-01-060215 MS	490-79781-1 MS	060515-26.D	06/05/2015 22:38
SC-01-060215 MSD	490-79781-1 MSD	060515-27.D	06/05/2015 23:07

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 060515-34.D Lab Sample ID: MB 490-254074/7  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: HP32 Date Analyzed: 06/06/2015 02:23  
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 490-254074/3	060515-30.D	06/06/2015 00:31
	LCSD 490-254074/4	060515-31.D	06/06/2015 00:59
Trip Blank	490-79645-9	060515-36.D	06/06/2015 03:19
OB-20A-060115	490-79645-1	060515-37.D	06/06/2015 03:47
FB-01-060115	490-79645-2	060515-42.D	06/06/2015 06:07
OB-20B-060115	490-79645-3	060515-43.D	06/06/2015 06:35
DUP-01-060115	490-79645-4	060515-44.D	06/06/2015 07:03
OB-27-060115	490-79645-5	060515-45.D	06/06/2015 07:30
OB-11R-060115	490-79645-6	060515-46.D	06/06/2015 07:58
OB-20A-060115 MS	490-79645-1 MS	060815-05.D	06/08/2015 12:18
OB-20A-060115 MSD	490-79645-1 MSD	060815-06.D	06/08/2015 12:46

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 060815-09.D Lab Sample ID: MB 490-254379/7  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: HP32 Date Analyzed: 06/08/2015 14:08  
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 490-254379/3	060815-03.D	06/08/2015 11:23
	LCSD 490-254379/4	060815-04.D	06/08/2015 11:51
Trip Blank	490-79781-10	060815-19.D	06/08/2015 18:42
SR-3-SEEP-060115	490-79645-7	060815-21.D	06/08/2015 19:37
RW-6A-060115	490-79645-8	060815-22.D	06/08/2015 20:05
	490-79558-B-2 MS	060815-26.D	06/08/2015 21:54
	490-79558-C-2 MSD	060815-27.D	06/08/2015 22:21

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:  

Lab File ID: 051815-17.D BFB Injection Date: 05/18/2015

Instrument ID: HP32 BFB Injection Time: 17:09

Analysis Batch No.: 249241

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.3
75	30.0 - 60.0 % of mass 95	49.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.2 (0.2)1
174	50.0 - 120.00 % of mass 95	92.8
175	5.0 - 9.0 % of mass 174	6.7 (7.3)1
176	95.0 - 101.0 % of mass 174	89.1 (96.0)1
177	5.0 - 9.0 % of mass 176	6.3 (7.0)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD0005 490-249241/2	051815-18.D	05/18/2015	17:36
	STD001 490-249241/3	051815-19.D	05/18/2015	18:03
	STD002 490-249241/4	051815-20.D	05/18/2015	18:30
	STD010 490-249241/5	051815-21.D	05/18/2015	18:57
	STD020 490-249241/6	051815-22.D	05/18/2015	19:24
	ICIS 490-249241/7	051815-23.D	05/18/2015	19:52
	STD100 490-249241/8	051815-24.D	05/18/2015	20:19
	STD200 490-249241/9	051815-25.D	05/18/2015	20:46
	ICV 490-249241/12	051815-28.D	05/18/2015	22:07

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:  

Lab File ID: 060515-01.D BFB Injection Date: 06/05/2015

Instrument ID: HP32 BFB Injection Time: 10:51

Analysis Batch No.: 253850

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.0
75	30.0 - 60.0 % of mass 95	50.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.4 (0.4)1
174	50.0 - 120.00 % of mass 95	93.8
175	5.0 - 9.0 % of mass 174	6.7 (7.1)1
176	95.0 - 101.0 % of mass 174	90.6 (96.5)1
177	5.0 - 9.0 % of mass 176	5.8 (6.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 490-253850/2	060515-02.D	06/05/2015	11:19
	LCS 490-253850/3	060515-03.D	06/05/2015	11:48
	LCSD 490-253850/4	060515-04.D	06/05/2015	12:16
	MB 490-253850/7	060515-07.D	06/05/2015	13:41
Trip Blank	490-79781-10	060515-11.D	06/05/2015	15:35
SC-01-060215	490-79781-1	060515-12.D	06/05/2015	16:04
PMP-Pond-060215	490-79781-2	060515-16.D	06/05/2015	17:57
RW-6-060215	490-79781-3	060515-17.D	06/05/2015	18:25
PMP-50-060215	490-79781-4	060515-18.D	06/05/2015	18:53
PAB-00-060215	490-79781-5	060515-19.D	06/05/2015	19:21
PAB-01-060215	490-79781-6	060515-20.D	06/05/2015	19:49
PAB-02-060215	490-79781-7	060515-21.D	06/05/2015	20:18
PMP-180-060315	490-79781-8	060515-22.D	06/05/2015	20:46
PMP-230-060315	490-79781-9	060515-23.D	06/05/2015	21:15
SC-01-060215 MS	490-79781-1 MS	060515-26.D	06/05/2015	22:38
SC-01-060215 MSD	490-79781-1 MSD	060515-27.D	06/05/2015	23:07

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 060515-28.D BFB Injection Date: 06/05/2015  
Instrument ID: HP32 BFB Injection Time: 23:35  
Analysis Batch No.: 254074

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.9
75	30.0 - 60.0 % of mass 95	48.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.7 (0.7)1
174	50.0 - 120.00 % of mass 95	95.8
175	5.0 - 9.0 % of mass 174	6.8 (7.1)1
176	95.0 - 101.0 % of mass 174	95.2 (99.4)1
177	5.0 - 9.0 % of mass 176	6.3 (6.6)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 490-254074/2	060515-29.D	06/06/2015	00:03
	LCS 490-254074/3	060515-30.D	06/06/2015	00:31
	LCSD 490-254074/4	060515-31.D	06/06/2015	00:59
	MB 490-254074/7	060515-34.D	06/06/2015	02:23
Trip Blank	490-79645-9	060515-36.D	06/06/2015	03:19
OB-20A-060115	490-79645-1	060515-37.D	06/06/2015	03:47
FB-01-060115	490-79645-2	060515-42.D	06/06/2015	06:07
OB-20B-060115	490-79645-3	060515-43.D	06/06/2015	06:35
DUP-01-060115	490-79645-4	060515-44.D	06/06/2015	07:03
OB-27-060115	490-79645-5	060515-45.D	06/06/2015	07:30
OB-11R-060115	490-79645-6	060515-46.D	06/06/2015	07:58
OB-20A-060115 MS	490-79645-1 MS	060815-05.D	06/08/2015	12:18
OB-20A-060115 MSD	490-79645-1 MSD	060815-06.D	06/08/2015	12:46

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:  

Lab File ID: 060815-01.D BFB Injection Date: 06/08/2015

Instrument ID: HP32 BFB Injection Time: 10:28

Analysis Batch No.: 254379

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.6
75	30.0 - 60.0 % of mass 95	48.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.5 (0.5)1
174	50.0 - 120.00 % of mass 95	87.1
175	5.0 - 9.0 % of mass 174	6.4 (7.4)1
176	95.0 - 101.0 % of mass 174	84.1 (96.5)1
177	5.0 - 9.0 % of mass 176	5.6 (6.7)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 490-254379/2	060815-02.D	06/08/2015	10:56
	LCS 490-254379/3	060815-03.D	06/08/2015	11:23
	LCSD 490-254379/4	060815-04.D	06/08/2015	11:51
	MB 490-254379/7	060815-09.D	06/08/2015	14:08
Trip Blank	490-79781-10	060815-19.D	06/08/2015	18:42
SR-3-SEEP-060115	490-79645-7	060815-21.D	06/08/2015	19:37
RW-6A-060115	490-79645-8	060815-22.D	06/08/2015	20:05
	490-79558-B-2 MS	060815-26.D	06/08/2015	21:54
	490-79558-C-2 MSD	060815-27.D	06/08/2015	22:21

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Sample No.: ICIS 490-249241/7 Date Analyzed: 05/18/2015 19:52  
Instrument ID: HP32 GC Column: DB-624 ID: 0.18 (mm)  
Lab File ID (Standard): 051815-23.D Heated Purge: (Y/N) N  
Calibration ID: 42270

	FB		CBZ		DCB	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	452646	3.45	339327	5.71	194874	7.82
UPPER LIMIT	905292	3.95	678654	6.21	389748	8.32
LOWER LIMIT	226323	2.95	169664	5.21	97437	7.32
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 490-249241/12		463764	3.45	346893	5.71	200683
CCVIS 490-253850/2		389508	3.45	284711	5.71	159248
CCVIS 490-254074/2		421164	3.45	316061	5.71	174414

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Sample No.: CCVIS 490-253850/2

Date Analyzed: 06/05/2015 11:19

Instrument ID: HP32

GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): 060515-02.D

Heated Purge: (Y/N) N

Calibration ID: 42270

	FB		CBZ		DCB	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	389508	3.45	284711	5.71	159248	7.82
UPPER LIMIT	779016	3.95	569422	6.21	318496	8.32
LOWER LIMIT	194754	2.95	142356	5.21	79624	7.32
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 490-253850/3		400298	3.45	289767	5.71	162666
LCSD 490-253850/4		395230	3.45	292551	5.71	163065
MB 490-253850/7		404058	3.45	265283	5.72	129161
490-79781-10	Trip Blank	352258	3.45	279198	5.72	119495
490-79781-1	SC-01-060215	349302	3.45	257693	5.72	137667
490-79781-2	PMP-Pond-060215	358800	3.45	249996	5.71	123805
490-79781-3	RW-6-060215	403171	3.45	265316	5.72	122465
490-79781-4	PMP-50-060215	354329	3.45	248296	5.71	120792
490-79781-5	PAB-00-060215	358601	3.45	250941	5.71	120707
490-79781-6	PAB-01-060215	348559	3.45	247634	5.71	120522
490-79781-7	PAB-02-060215	352902	3.45	245187	5.72	119595
490-79781-8	PMP-180-060315	394143	3.45	244501	5.71	121745
490-79781-9	PMP-230-060315	355432	3.45	251270	5.71	128579
490-79781-1 MS	SC-01-060215 MS	439198	3.45	315684	5.71	173304
490-79781-1 MSD	SC-01-060215 MSD	435679	3.45	316147	5.71	173872

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Sample No.: CCVIS 490-254074/2

Date Analyzed: 06/06/2015 00:03

Instrument ID: HP32

GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): 060515-29.D

Heated Purge: (Y/N) N

Calibration ID: 42270

	FB		CBZ		DCB		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	421164	3.45	316061	5.71	174414	7.82	
UPPER LIMIT	842328	3.95	632122	6.21	348828	8.32	
LOWER LIMIT	210582	2.95	158031	5.21	87207	7.32	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 490-254074/3		432705	3.45	317029	5.71	172301	7.82
LCSD 490-254074/4		431727	3.45	338326	5.71	180131	7.82
MB 490-254074/7		435140	3.45	304875	5.72	156120	7.82
490-79645-9	Trip Blank	403257	3.45	302238	5.72	151589	7.83
490-79645-1	OB-20A-060115	432873	3.45	322008	5.71	162178	7.83
490-79645-2	FB-01-060115	429226	3.45	314330	5.72	155392	7.83
490-79645-3	OB-20B-060115	428463	3.45	314567	5.71	155903	7.83
490-79645-4	DUP-01-060115	429650	3.45	309524	5.72	159061	7.82
490-79645-5	OB-27-060115	433308	3.45	310869	5.71	161488	7.82
490-79645-6	OB-11R-060115	426476	3.45	315739	5.71	160831	7.82
490-79645-1 MS	OB-20A-060115 MS	440429	3.45	345295	5.71	181217	7.82
490-79645-1 MSD	OB-20A-060115 MSD	440357	3.45	343605	5.72	179363	7.82

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Sample No.: CCVIS 490-254379/2 Date Analyzed: 06/08/2015 10:56

Instrument ID: HP32 GC Column: DB-624 ID: 0.18 (mm)

Lab File ID (Standard): 060815-02.D Heated Purge: (Y/N) N

Calibration ID: 42270

	FB		CBZ		DCB	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	453174	3.45	342351	5.71	180731	7.82
UPPER LIMIT	906348	3.95	684702	6.21	361462	8.32
LOWER LIMIT	226587	2.95	171176	5.21	90366	7.32
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 490-254379/3		450431	3.45	345200	5.72	178497
LCSD 490-254379/4		450113	3.45	351615	5.72	181695
MB 490-254379/7		419759	3.45	324148	5.71	162954
490-79781-10	Trip Blank	413227	3.45	303513	5.71	149476
490-79645-7	SR-3-SEEP-060115	419024	3.45	297732	5.72	145820
490-79645-8	RW-6A-060115	417995	3.45	301986	5.72	157039
490-79558-B-2 MS		428188	3.45	333802	5.71	174970
490-79558-C-2 MSD		433269	3.45	340556	5.71	174948

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115

Lab Sample ID: 490-79645-1

Matrix: Ground Water

Lab File ID: 060515-37.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 03:47

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115

Lab Sample ID: 490-79645-1

Matrix: Ground Water

Lab File ID: 060515-37.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 03:47

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		70-130
1868-53-7	Dibromofluoromethane (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: OB-20A-060115 Lab Sample ID: 490-79645-1  
Matrix: Ground Water Lab File ID: 060515-37.D  
Analysis Method: 8260C Date Collected: 06/01/2015 10:50  
Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 03:47  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 254074 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-37.D  
 Lims ID: 490-79645-A-1 Lab Sample ID: 490-79645-1  
 Client ID: OB-20A-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 03:47:30 ALS Bottle#: 37 Worklist Smp#: 10  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-1  
 Misc. Info.: 490-0056110-010  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:53:10 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:53:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.446	0.002	99	432873	25.0	
* 2 Chlorobenzene-d5	117	5.713	5.711	0.002	83	322008	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.825	7.823	0.002	94	162178	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.027	0.002	94	97432	23.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.239	0.002	0	90391	24.6	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.551	0.002	92	410228	25.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.750	0.002	96	132544	27.6	
23 Acetone	58	1.853	1.842	0.011	99	244	0.3987	
53 Cyclohexane	56	3.078	3.077	0.001	77	804	0.1016	
76 Toluene	91	4.613	4.601	0.012	98	1851	0.0846	
90 m-Xylene & p-Xylene	91	5.968	5.935	0.033	0	2094	0.1223	
94 Isopropylbenzene	105	6.627	6.610	0.017	95	3399	0.1593	
111 1,2,3-Trimethylbenzene	105	7.923	7.900	0.023	19	2380	0.1459	
S 134 Xylenes, Total	1				0		0.1223	

**Reagents:**

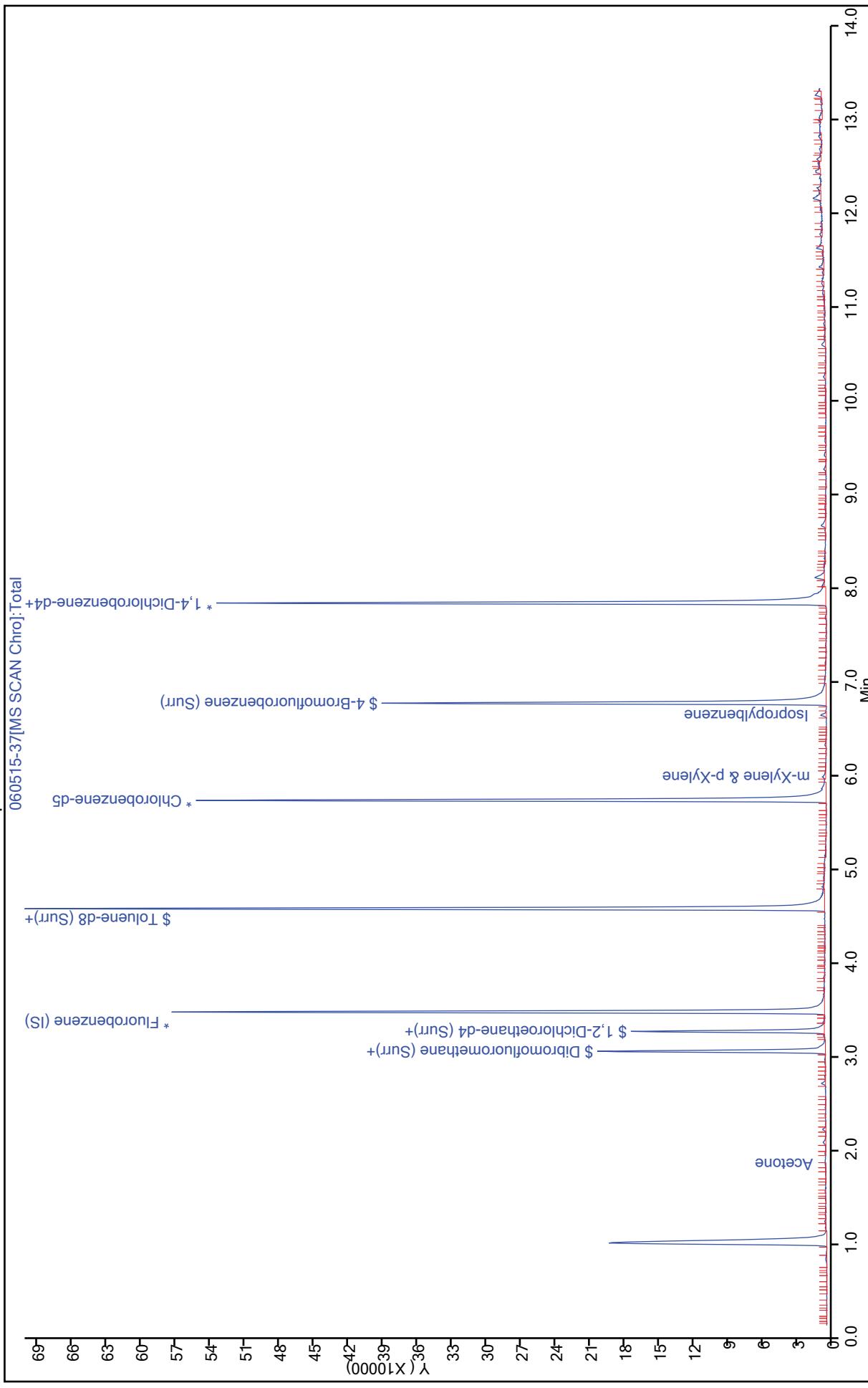
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 09:53:22

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-37.D  
Injection Date: 06-Jun-2015 03:47:30  
Lims ID: 490-79645-A-1  
Client ID: OB-20A-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 10  
Instrument ID: HP32  
Lab Sample ID: 490-79645-1  
Dil. Factor: 1.0000  
ALS Bottle#: 37  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: FB-01-060115

Lab Sample ID: 490-79645-2

Matrix: Water

Lab File ID: 060515-42.D

Analysis Method: 8260C

Date Collected: 06/01/2015 11:20

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 06:07

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	1.6	J	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: FB-01-060115

Lab Sample ID: 490-79645-2

Matrix: Water

Lab File ID: 060515-42.D

Analysis Method: 8260C

Date Collected: 06/01/2015 11:20

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 06:07

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
1868-53-7	Dibromofluoromethane (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: FB-01-060115

Lab Sample ID: 490-79645-2

Matrix: Water

Lab File ID: 060515-42.D

Analysis Method: 8260C

Date Collected: 06/01/2015 11:20

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 06:07

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

Number TICs Found: 0

TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-42.D  
 Lims ID: 490-79645-A-2 Lab Sample ID: 490-79645-2  
 Client ID: FB-01-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 06:07:30 ALS Bottle#: 42 Worklist Smp#: 15  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-2  
 Misc. Info.: 490-0056110-015  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:56:15 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:56:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.451	3.446	0.005	99	429226	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.711	0.004	84	314330	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.827	7.823	0.004	93	155392	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.027	-0.001	94	102114	24.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.239	-0.001	0	87981	24.2	
\$ 6 Toluene-d8 (Surr)	98	4.556	4.551	0.005	93	409128	26.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.755	6.750	0.005	97	130164	28.3	
23 Acetone	58	1.845	1.842	0.003	81	281	0.6444	
31 Methylene Chloride	84	2.063	2.059	0.004	85	8772	1.61	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-42.D  
 Lims ID: 490-79645-A-2 Lab Sample ID: 490-79645-2  
 Client ID: FB-01-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 06:07:30 ALS Bottle#: 42 Worklist Smp#: 15  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-2  
 Misc. Info.: 490-0056110-015  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 09:56:15 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:56:15

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.755 130164

**Reagents:**

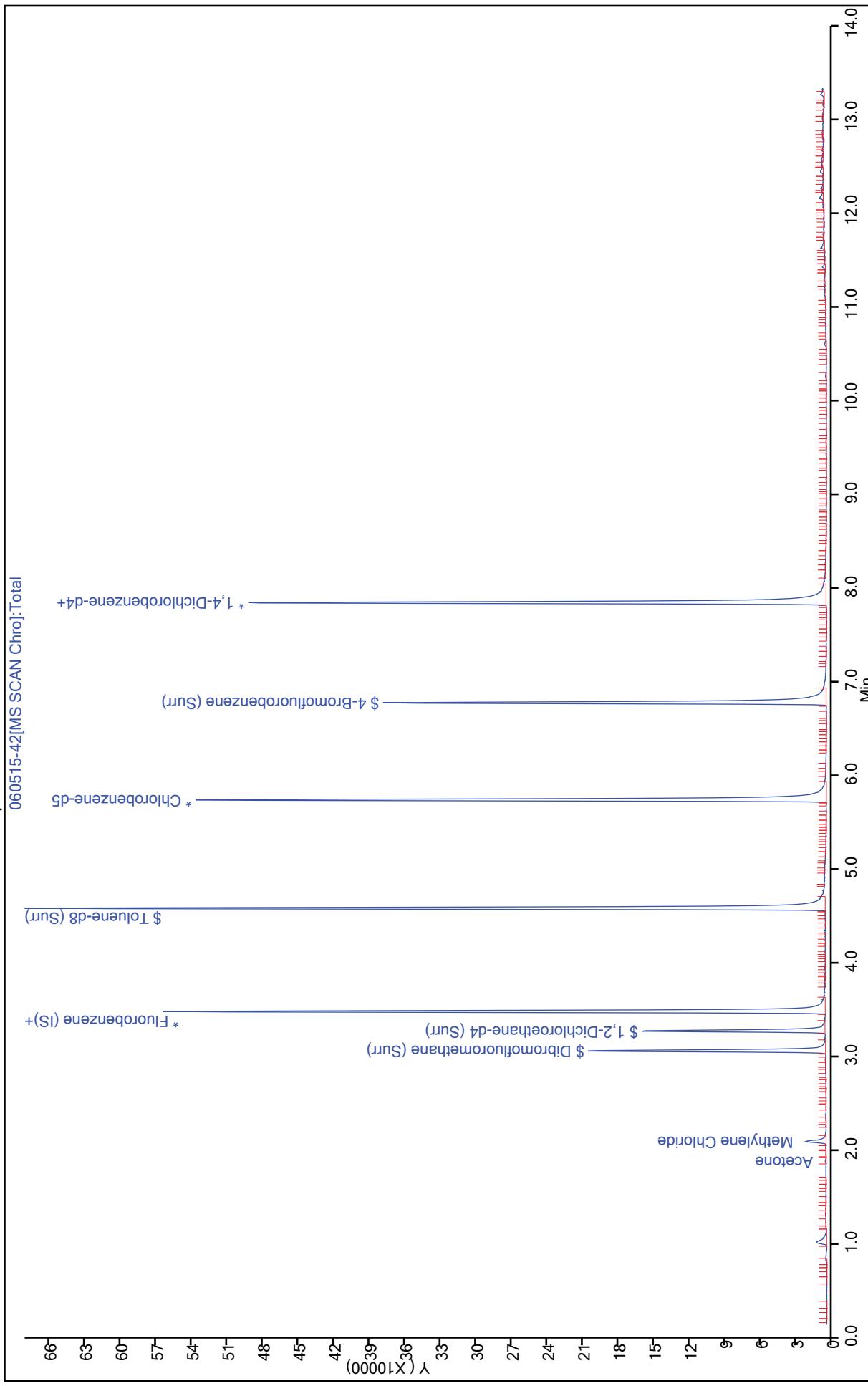
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 09:56:16

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-42.D  
Injection Date: 06-Jun-2015 06:07:30  
Lims ID: 490-79645-A-2  
Client ID: FB-01-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 15  
Instrument ID: HP32  
Lab Sample ID: 490-79645-2  
Dil. Factor: 1.0000  
ALS Bottle#: 42  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-42.D

Injection Date: 06-Jun-2015 06:07:30

Instrument ID: HP32

Lims ID: 490-79645-A-2

Lab Sample ID: 490-79645-2

Client ID: FB-01-060115

ALS Bottle#: 42 Worklist Smp#: 15

Operator ID: EML

Dil. Factor: 1.0000

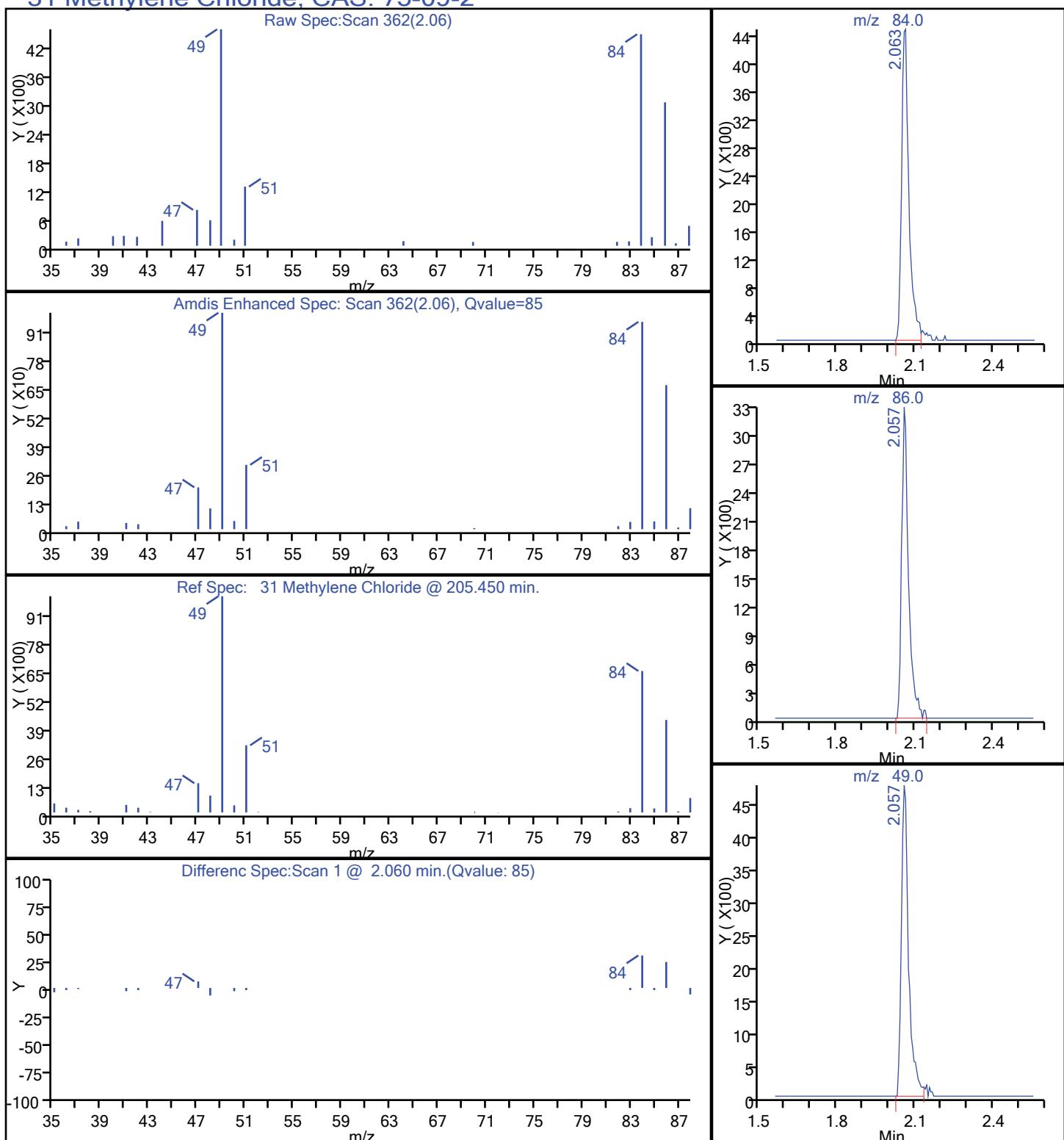
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**31 Methylene Chloride, CAS: 75-09-2**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20B-060115

Lab Sample ID: 490-79645-3

Matrix: Ground Water

Lab File ID: 060515-43.D

Analysis Method: 8260C

Date Collected: 06/01/2015 12:20

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 06:35

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.27	J	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	1.7		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.96	J	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.50		0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20B-060115

Lab Sample ID: 490-79645-3

Matrix: Ground Water

Lab File ID: 060515-43.D

Analysis Method: 8260C

Date Collected: 06/01/2015 12:20

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 06:35

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: OB-20B-060115 Lab Sample ID: 490-79645-3  
 Matrix: Ground Water Lab File ID: 060515-43.D  
 Analysis Method: 8260C Date Collected: 06/01/2015 12:20  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 06:35  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 254074 Units: ug/L  
 Number TICs Found: 6 TIC Result Total: 14.66

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		1.6	J
110-54-3	Hexane	2.35	0.16	J
496-11-7	Indane	8.09	4.9	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.94	2.7	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.39	3.6	J N
91-20-3	Naphthalene	10.12	1.7	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-43.D  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 06:35:30 ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-3  
 Misc. Info.: 490-0056110-016  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:59:31 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:59:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.446	0.002	99	428463	25.0	
* 2 Chlorobenzene-d5	117	5.713	5.711	0.002	83	314567	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.825	7.823	0.002	94	155903	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.027	0.002	94	100328	24.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.239	0.002	0	87823	24.2	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.551	0.002	92	408052	26.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.753	6.750	0.002	96	129387	28.1	
15 Chloroethane	64	1.434	1.428	0.006	99	6146	1.73	
37 1,1-Dichloroethane	63	2.425	2.424	0.001	95	1832	0.2280	
42 cis-1,2-Dichloroethene	61	2.757	2.757	0.012	2	514	0.0722	
53 Cyclohexane	56	3.078	3.077	0.001	86	7532	0.9620	
57 Benzene	78	3.285	3.273	0.012	92	5330	0.2739	
65 Methylcyclohexane	83	3.813	3.818	-0.005	81	4405	0.5016	
76 Toluene	91	4.613	4.601	0.012	99	2154	0.1008	
87 Chlorobenzene	112	5.740	5.739	0.001	83	2040	0.1507	
90 m-Xylene & p-Xylene	91	5.969	5.935	0.034	0	1820	0.1088	
94 Isopropylbenzene	105	6.627	6.610	0.017	95	1332	0.0639	
110 1,4-Dichlorobenzene	146	7.852	7.852	0.006	1	1059	0.1094	
S 134 Xylenes, Total	1				0		0.1088	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-43.D  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 06:35:30 ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-3  
 Misc. Info.: 490-0056110-016  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 09:59:31 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:59:30

Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Hexane	2.349	982	0.1574	
BFB	6.753	128561		
1,2,3-Trimethylbenzene	7.917	2191	0.1397	
n-Butylbenzene	8.195	1425	0.1046	
Naphthalene	10.117	9308	1.70	

Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
496-11-7	Indane							
8.086	173573	4.88	3	93	8676	C9H10	118	
95-93-2	Benzene, 1,2,4,5-tetramethyl-							
8.935	95427	2.68	3	95	14355	C10H14	134	
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-							
9.387	128210	3.60	3	95	13603	C10H12	132	

Quantitation Compounds

Compound	RT	Response	Amount ug/l
----------	----	----------	-------------

\* 3 1,4-Dichlorobenzene-d4 7.825 889748 25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

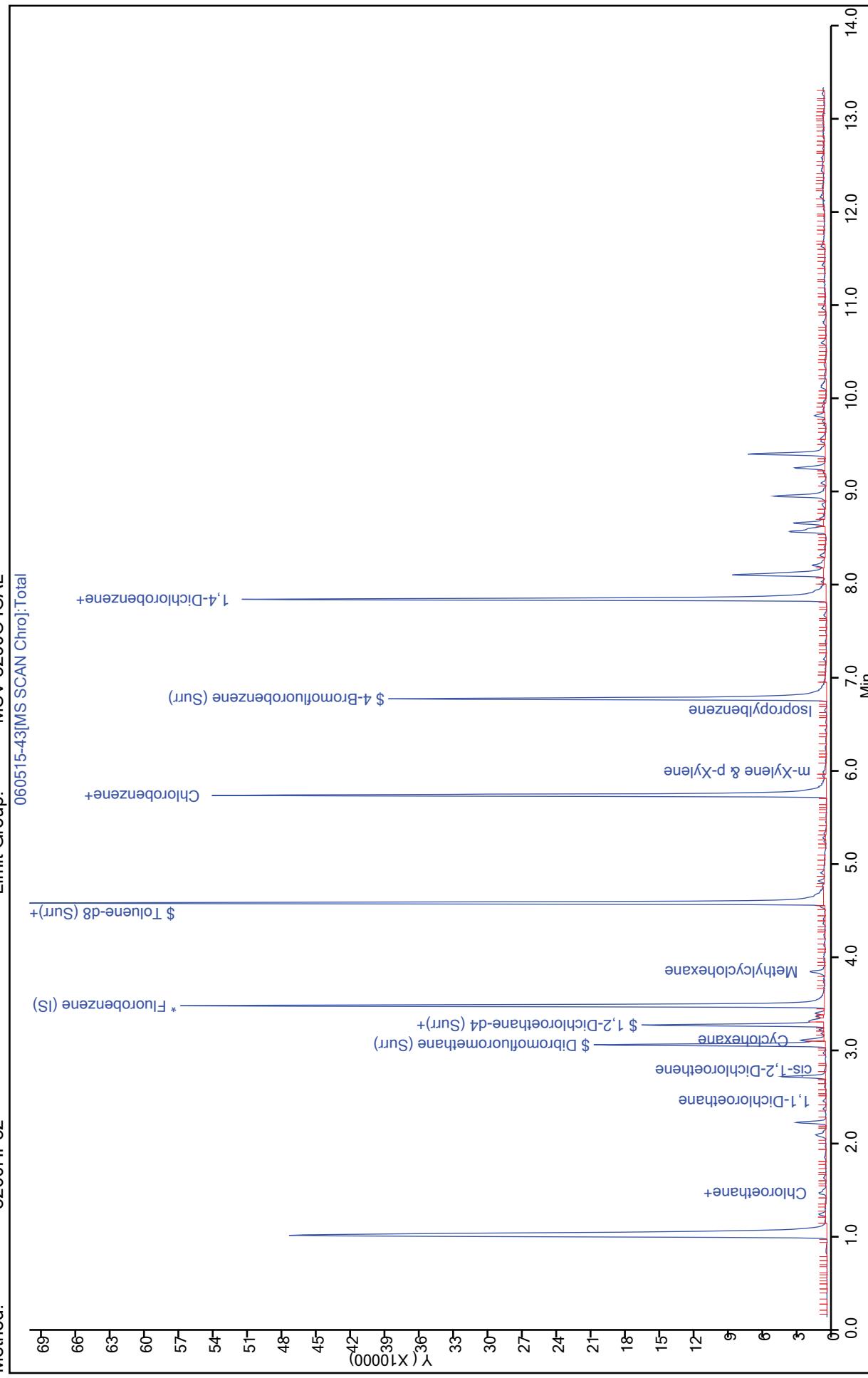
Run Reagent

Report Date: 10-Jun-2015 09:59:32

Chrom Revision: 2.2 14-May-2015 11:41:56

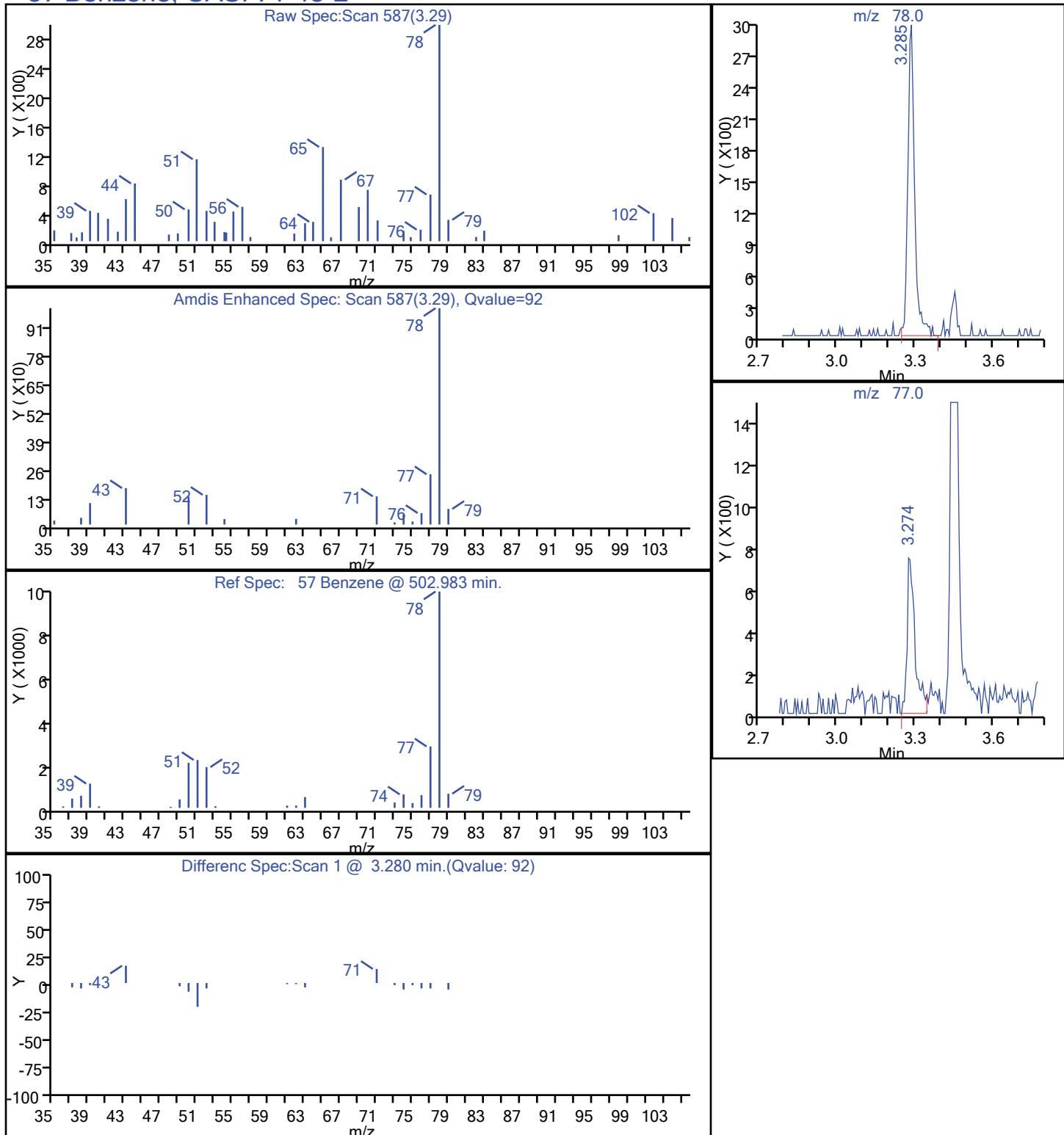
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Injection Date: 06-Jun-2015 06:35:30  
Lims ID: 490-79645-A-3  
Client ID: OB-20B-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 16  
Instrument ID: HP32  
Lab Sample ID: 490-79645-3  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL  
ALS Bottle#: 43



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D  
 Injection Date: 06-Jun-2015 06:35:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Operator ID: EML ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 57 Benzene, CAS: 71-43-2



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D

Injection Date: 06-Jun-2015 06:35:30

Instrument ID: HP32

Lims ID: 490-79645-A-3

Lab Sample ID: 490-79645-3

Client ID: OB-20B-060115

ALS Bottle#: 43 Worklist Smp#: 16

Operator ID: EML

Dil. Factor: 1.0000

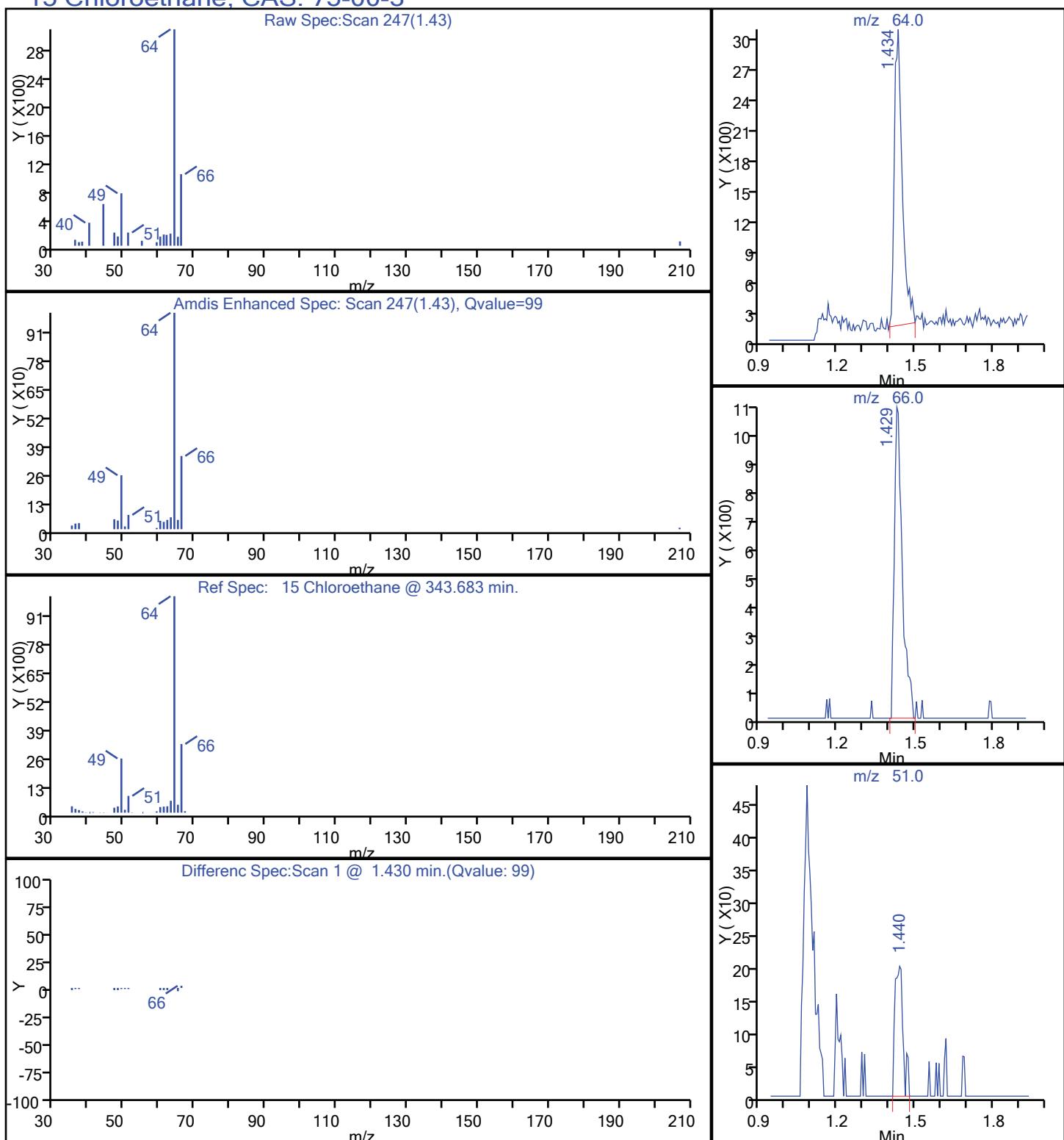
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

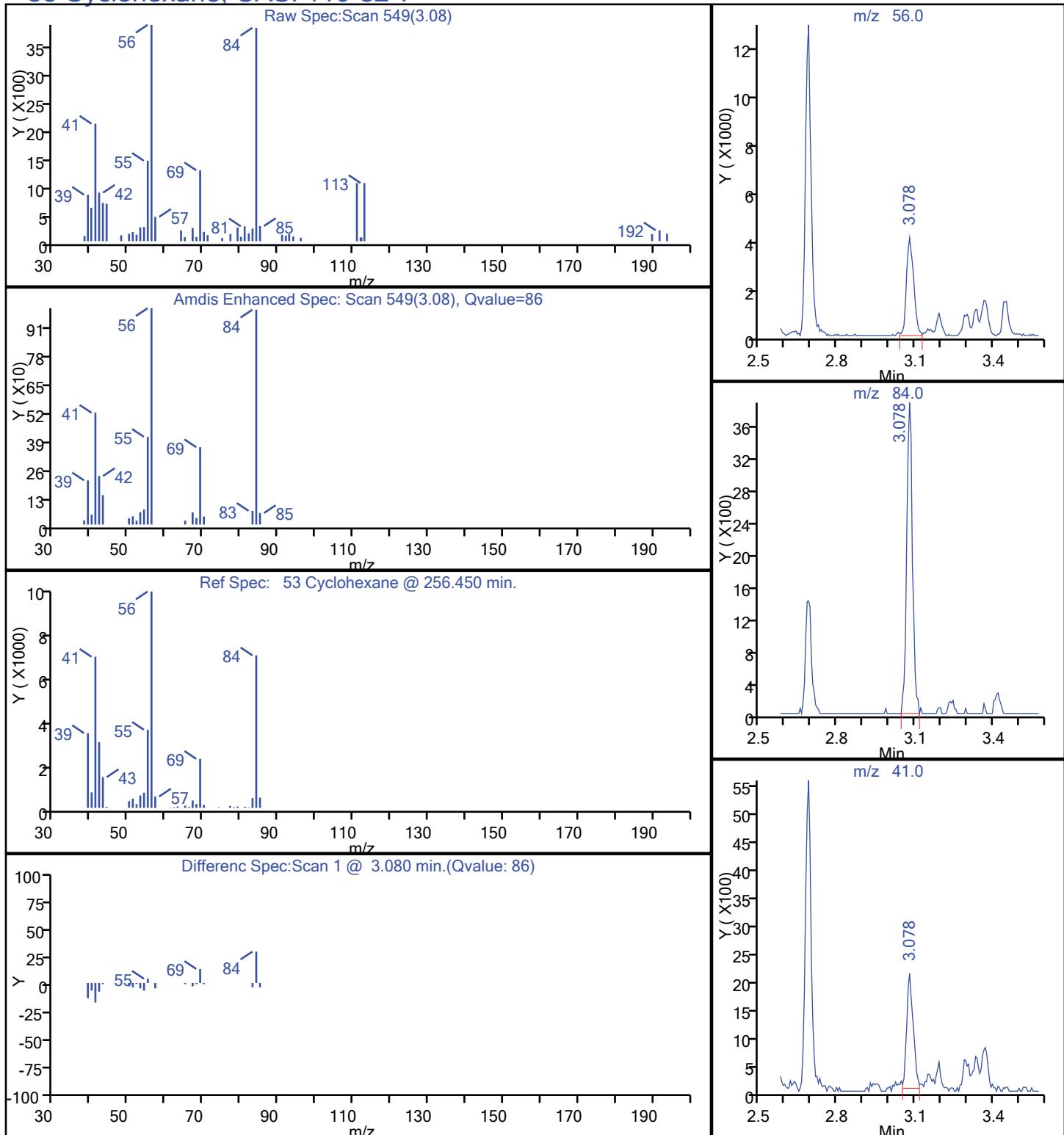
Column:

**15 Chloroethane, CAS: 75-00-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D  
 Injection Date: 06-Jun-2015 06:35:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Operator ID: EML ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

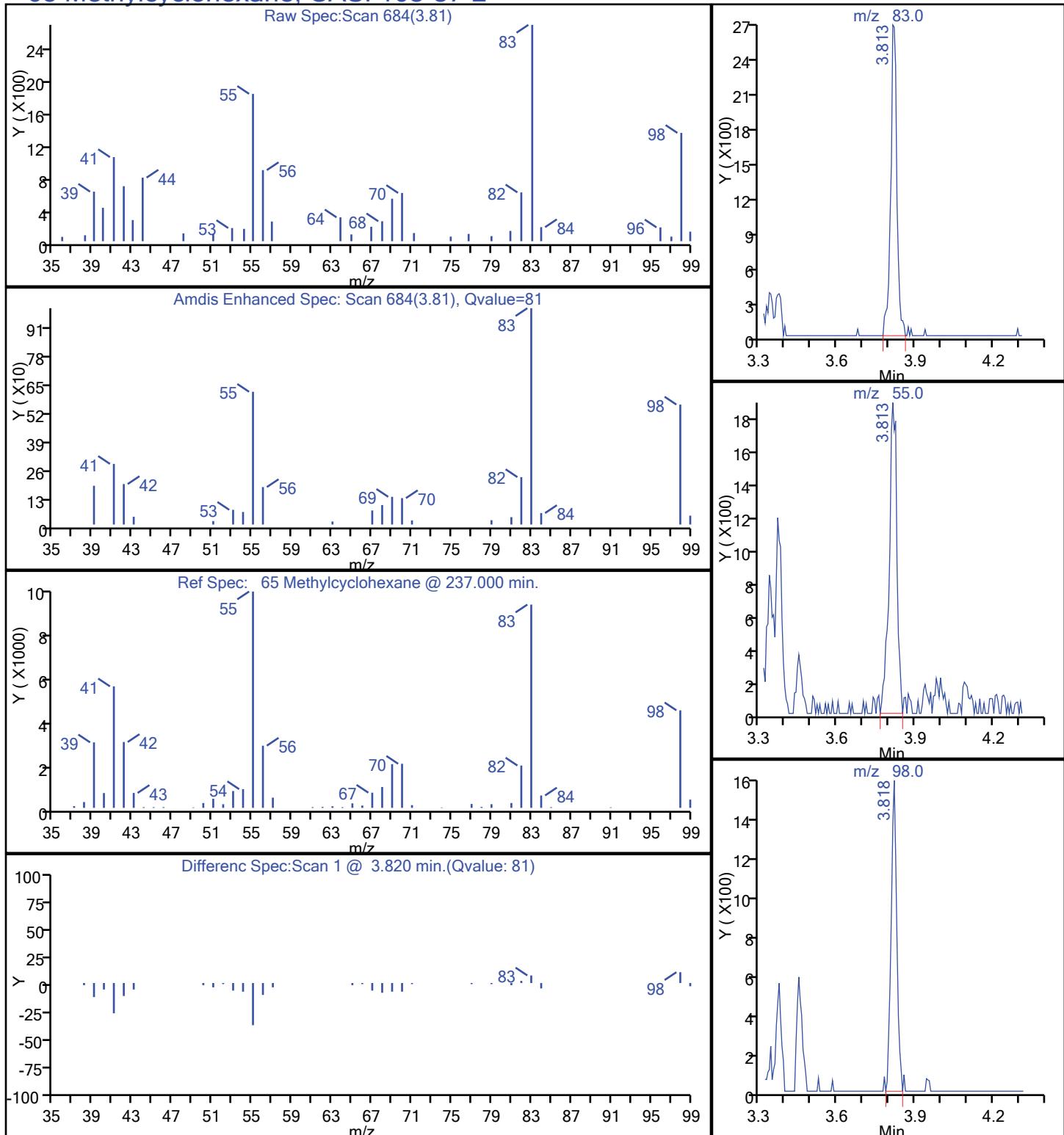
## 53 Cyclohexane, CAS: 110-82-7



## TestAmerica Nashville

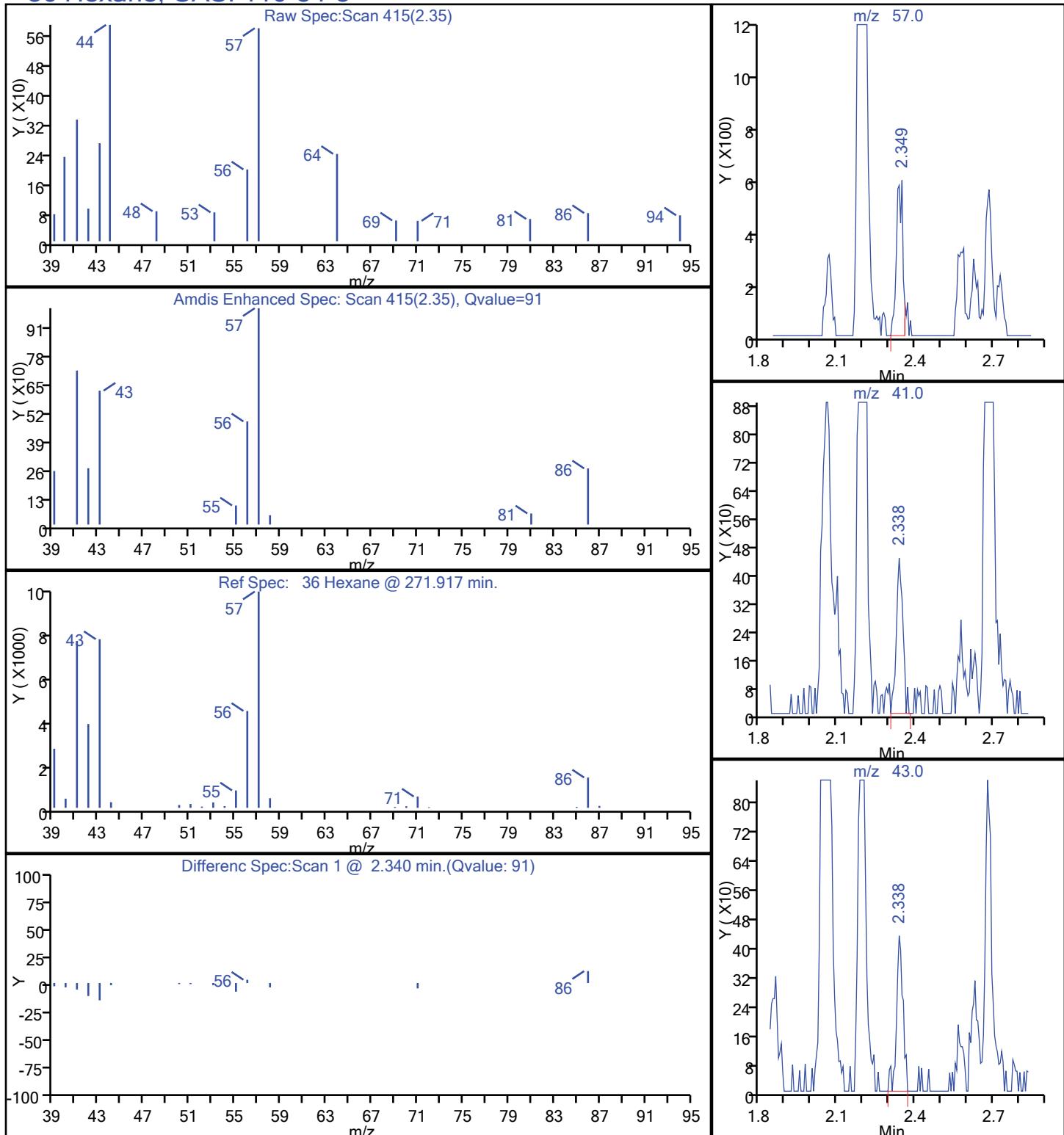
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 Injection Date: 06-Jun-2015 06:35:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Operator ID: EML ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D  
 Injection Date: 06-Jun-2015 06:35:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Operator ID: EML ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 36 Hexane, CAS: 110-54-3



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D

Injection Date: 06-Jun-2015 06:35:30

Instrument ID: HP32

Lims ID: 490-79645-A-3

Lab Sample ID: 490-79645-3

Client ID: OB-20B-060115

ALS Bottle#: 43 Worklist Smp#: 16

Operator ID: EML

Dil. Factor: 1.0000

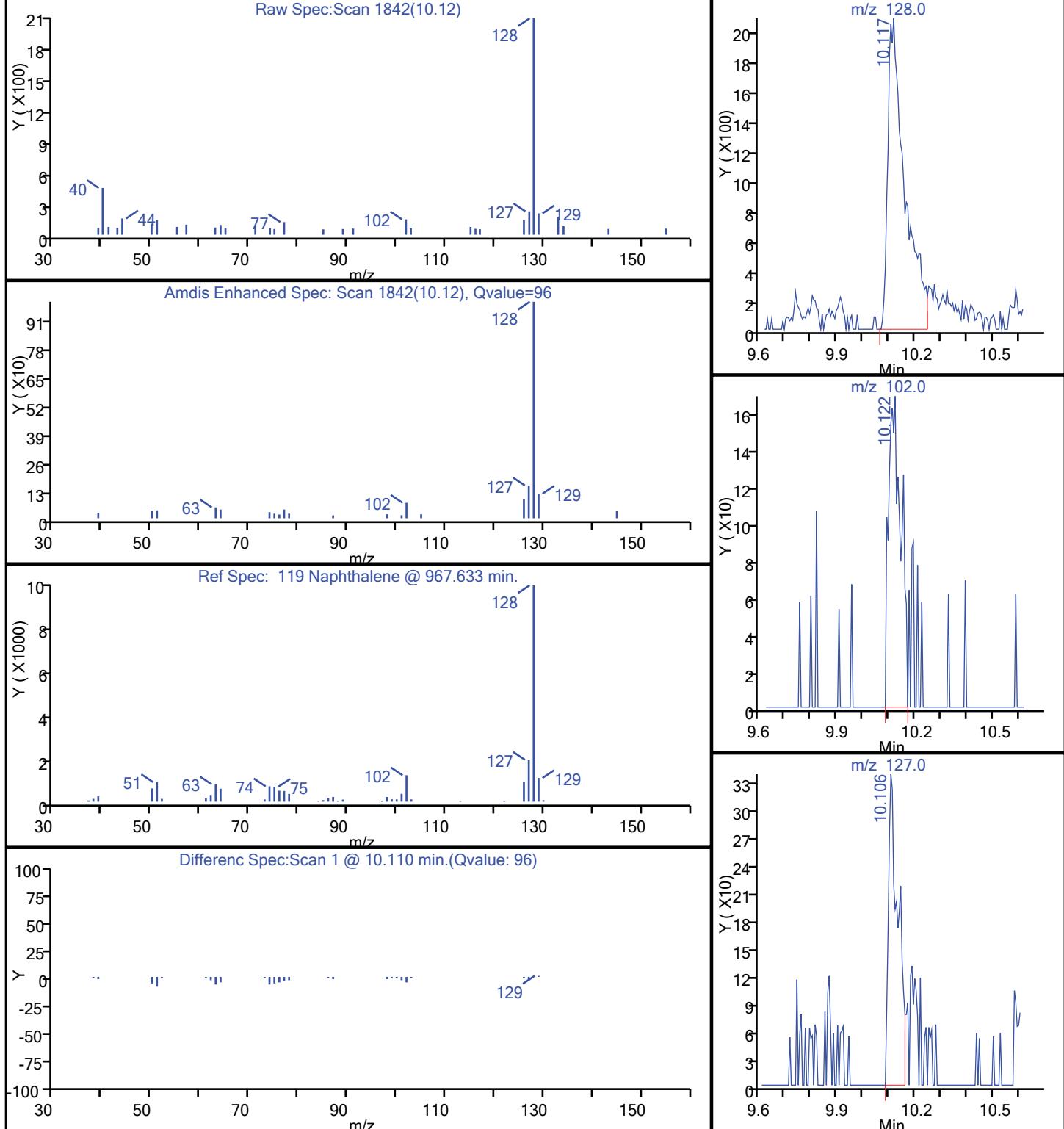
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**119 Naphthalene, CAS: 91-20-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D

Injection Date: 06-Jun-2015 06:35:30

Instrument ID: HP32

Lims ID: 490-79645-A-3

Lab Sample ID: 490-79645-3

Client ID: OB-20B-060115

Operator ID: EML

ALS Bottle#: 43 Worklist Smp#: 16

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

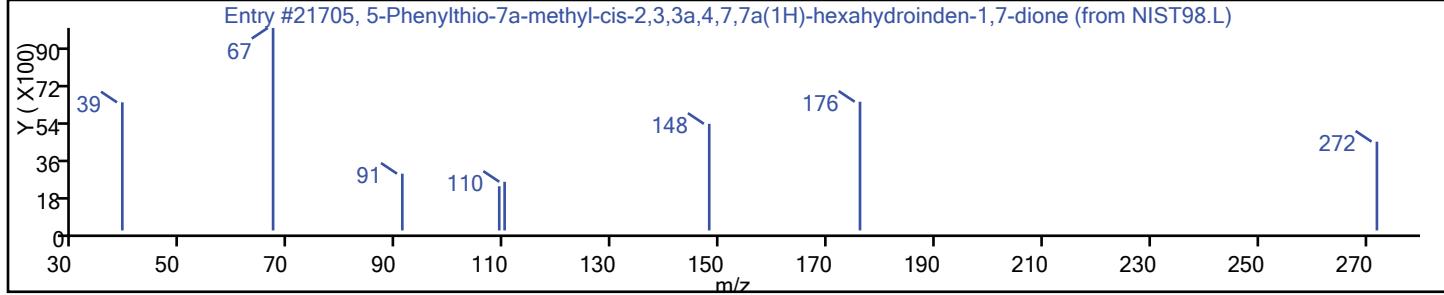
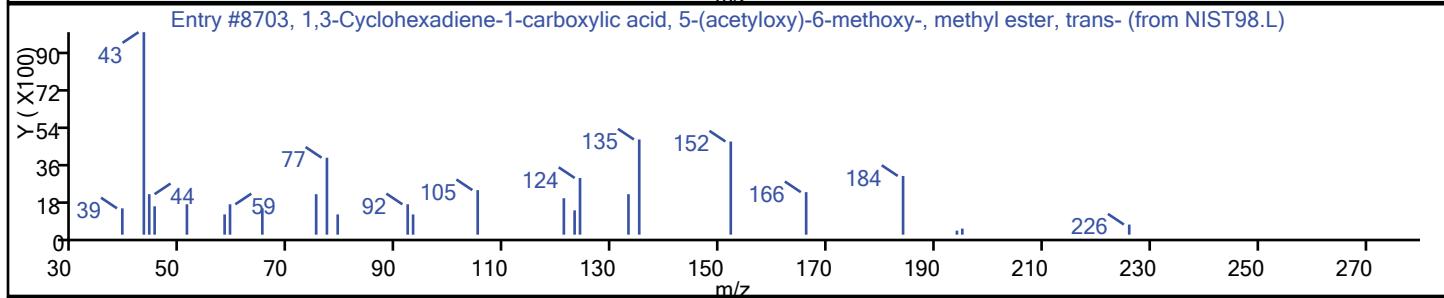
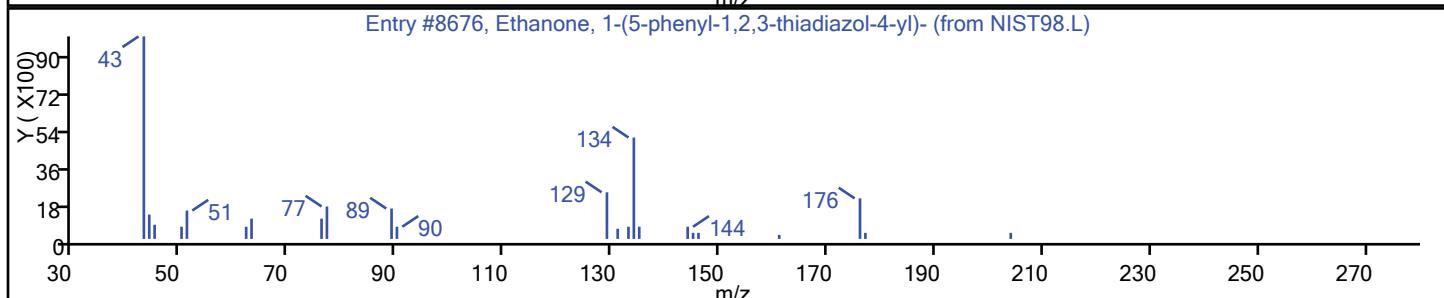
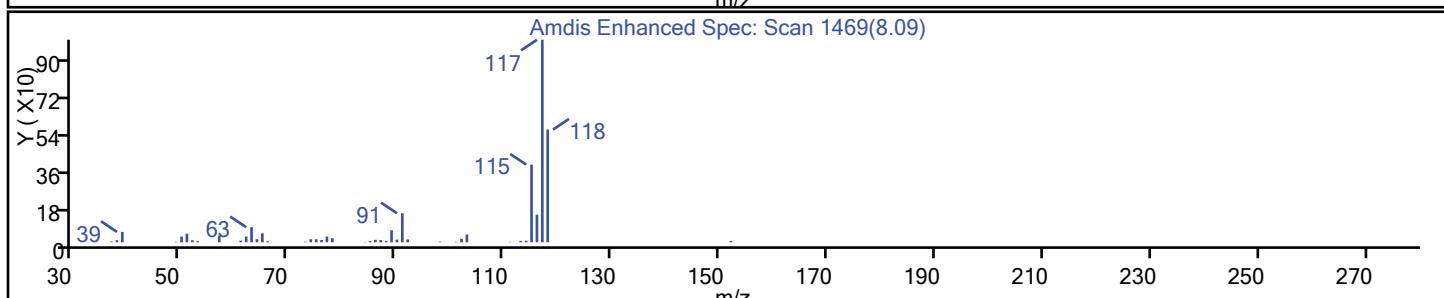
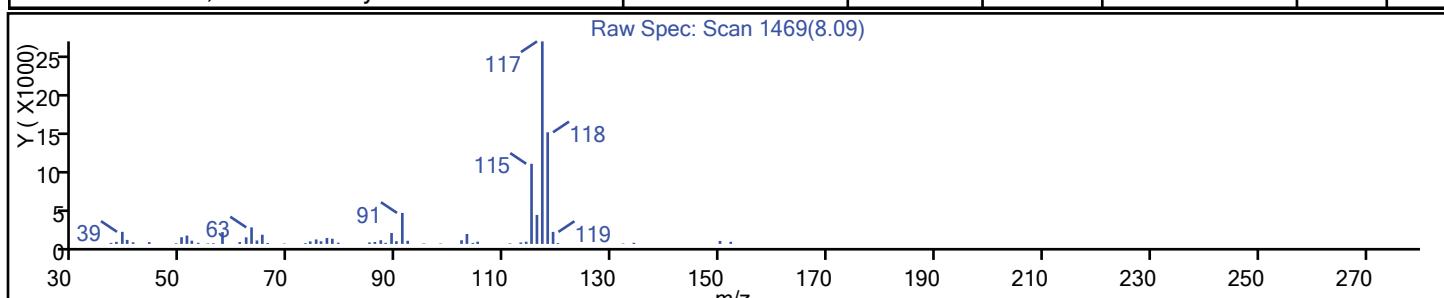
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

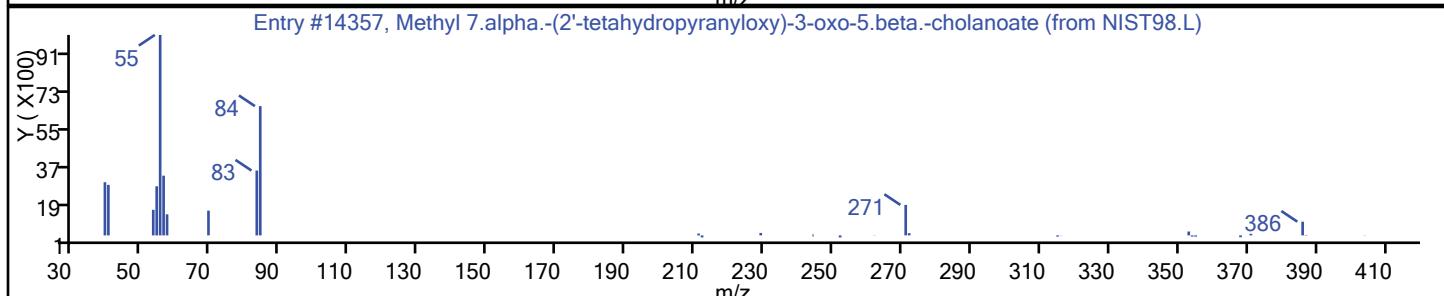
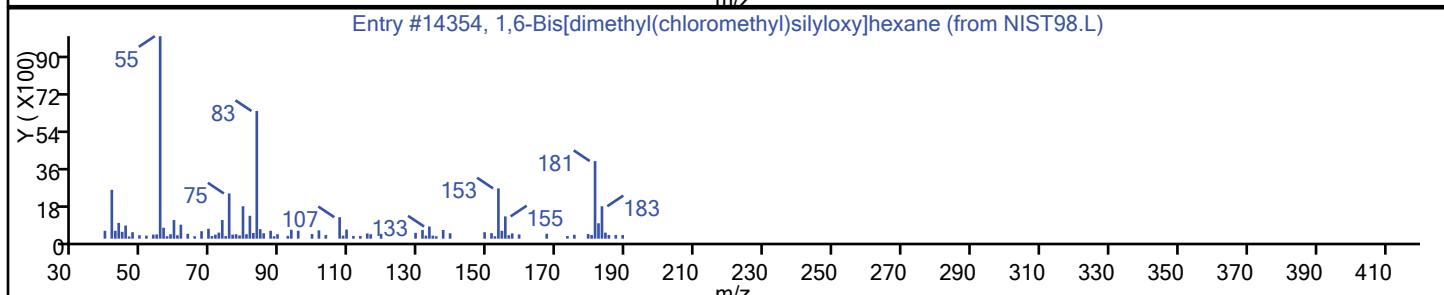
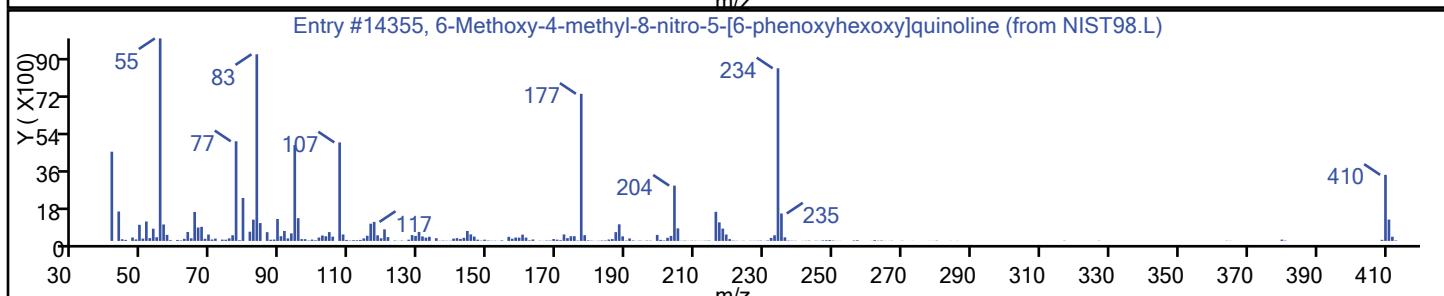
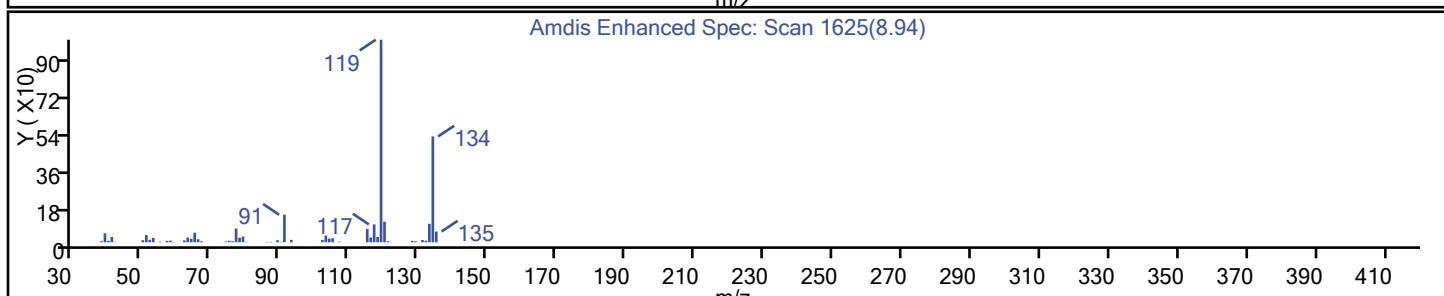
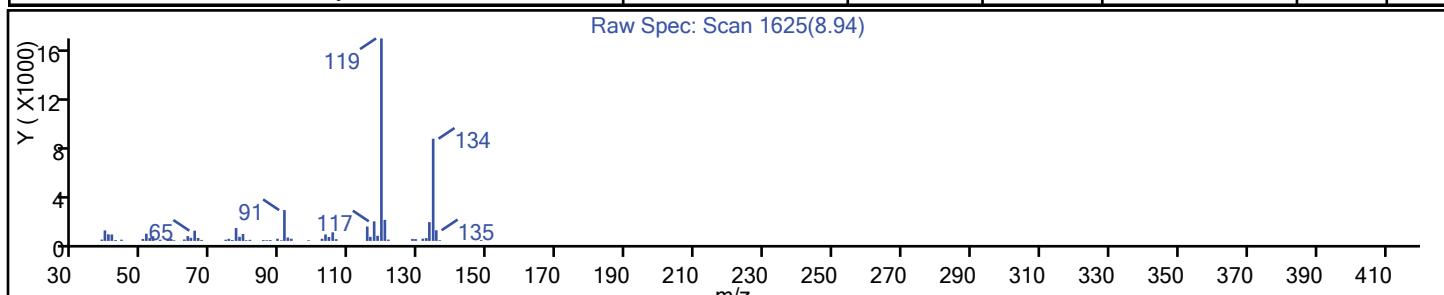
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Indane	496-11-7	NIST98	8676	C9H10	118	93
7-Methylenecycloocta-1,3,5-triene	2570-13-0	NIST98.L	8703	C9H10	118	59
Benzeneethanol, .beta.-ethenyl-	6052-63-7	NIST98.L	21705	C10H12O	148	59



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D  
 Injection Date: 06-Jun-2015 06:35:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-3 Lab Sample ID: 490-79645-3  
 Client ID: OB-20B-060115  
 Operator ID: EML ALS Bottle#: 43 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98	14355	C10H14	134	95
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98.L	14354	C10H14	134	95
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98.L	14357	C10H14	134	94



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-43.D

Injection Date: 06-Jun-2015 06:35:30

Instrument ID: HP32

Lims ID: 490-79645-A-3

Lab Sample ID: 490-79645-3

Client ID: OB-20B-060115

Operator ID: EML

ALS Bottle#: 43 Worklist Smp#: 16

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

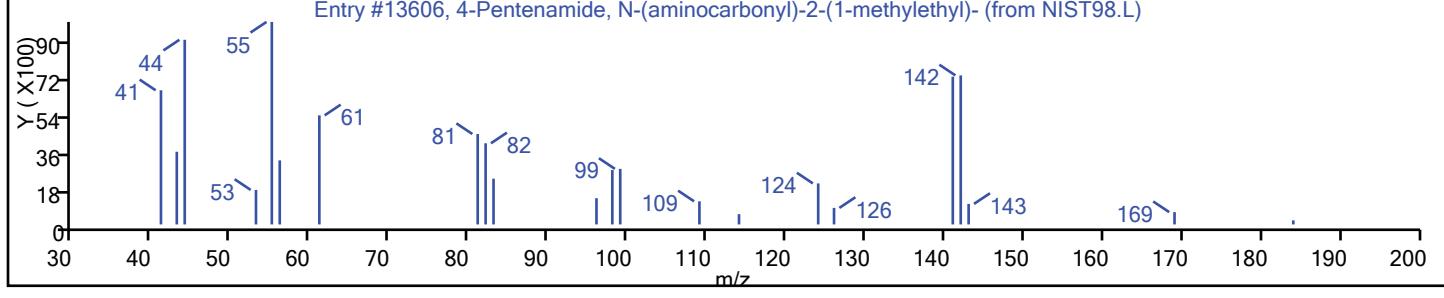
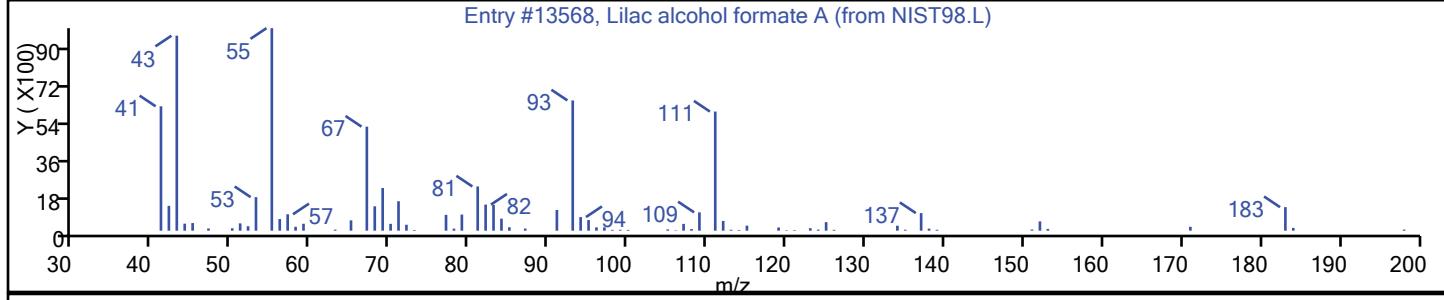
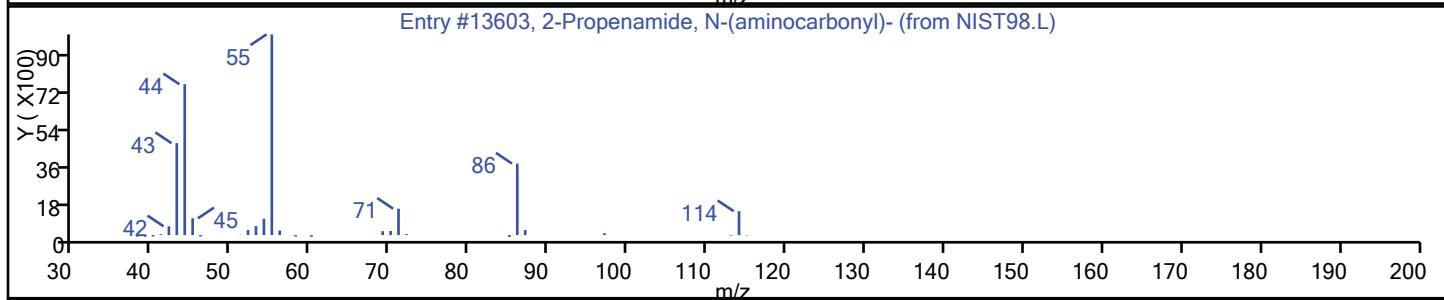
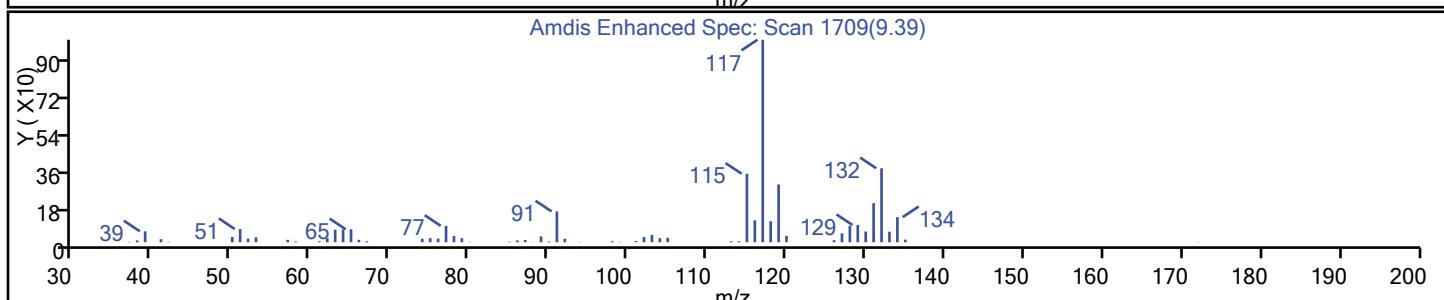
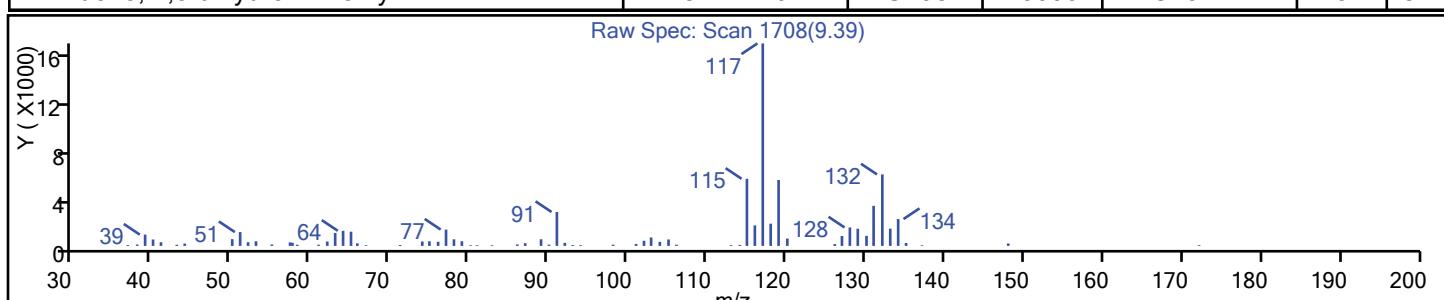
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2-ethenyl-1,4-dimethyl-	2039-89-6	NIST98	13603	C10H12	132	95
3-Phenylbut-1-ene	934-10-1	NIST98.L	13568	C10H12	132	81
1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	NIST98.L	13606	C10H12	132	81



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: DUP-01-060115

Lab Sample ID: 490-79645-4

Matrix: Ground Water

Lab File ID: 060515-44.D

Analysis Method: 8260C

Date Collected: 06/01/2015 00:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 07:03

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.27	J	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	1.9		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.91	J	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.44	J	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: DUP-01-060115

Lab Sample ID: 490-79645-4

Matrix: Ground Water

Lab File ID: 060515-44.D

Analysis Method: 8260C

Date Collected: 06/01/2015 00:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 07:03

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.19	J	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		70-130
1868-53-7	Dibromofluoromethane (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: DUP-01-060115 Lab Sample ID: 490-79645-4  
 Matrix: Ground Water Lab File ID: 060515-44.D  
 Analysis Method: 8260C Date Collected: 06/01/2015 00:00  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 07:03  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 254074 Units: ug/L  
 Number TICs Found: 5 TIC Result Total: 11.26

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		1.4	J
110-54-3	Hexane	2.34	0.16	J
26146-77-0	trans-Cinnamyl bromide	8.09	4.7	J N
3454-07-7	Benzene, 1-ethenyl-4-ethyl-	9.39	3.3	J N
91-20-3	Naphthalene	10.11	1.7	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-44.D  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:03:30 ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-4  
 Misc. Info.: 490-0056110-017  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:01:56 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:01:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.446	0.006	99	429650	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	309524	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	94	159061	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.027	0.000	94	99523	24.1	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.239	0.000	0	89098	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.557	4.551	0.006	92	402780	26.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.750	6.750	0.000	95	132257	28.1	
15 Chloroethane	64	1.427	1.428	-0.001	100	6643	1.88	
37 1,1-Dichloroethane	63	2.423	2.424	-0.001	93	1654	0.2053	
42 cis-1,2-Dichloroethene	61	2.755	2.745	0.010	66	455	0.0637	
53 Cyclohexane	56	3.076	3.077	-0.001	89	7143	0.9098	
57 Benzene	78	3.283	3.273	0.010	91	5186	0.2658	
65 Methylcyclohexane	83	3.816	3.818	-0.002	85	3870	0.4395	
76 Toluene	91	4.611	4.601	0.010	97	3929	0.1868	
90 m-Xylene & p-Xylene	91	5.967	5.935	0.032	0	2338	0.1420	
91 o-Xylene	91	6.310	6.278	0.032	89	833	0.0509	
94 Isopropylbenzene	105	6.625	6.610	0.015	91	1192	0.0581	
110 1,4-Dichlorobenzene	146	7.850	7.846	0.004	85	1088	0.1102	
S 134 Xylenes, Total	1				0		0.1929	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-44.D  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:03:30 ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-4  
 Misc. Info.: 490-0056110-017  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 10:01:56 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:01:55

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Hexane	2.341	1016	0.1624	
BFB	6.750	132257		
1,2,3-Trimethylbenzene	7.921	1835	0.1147	
Naphthalene	10.109	9270	1.68	

## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
26146-77-0	trans-Cinnamyl bromide							
8.090	166674	4.69	3	72	53970	C9H9Br	196	
3454-07-7	Benzene, 1-ethenyl-4-ethyl-							
9.391	116759	3.28	3	89	13588	C10H12	132	

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 3 1,4-Dichlorobenzene-d4	7.823	888612	25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

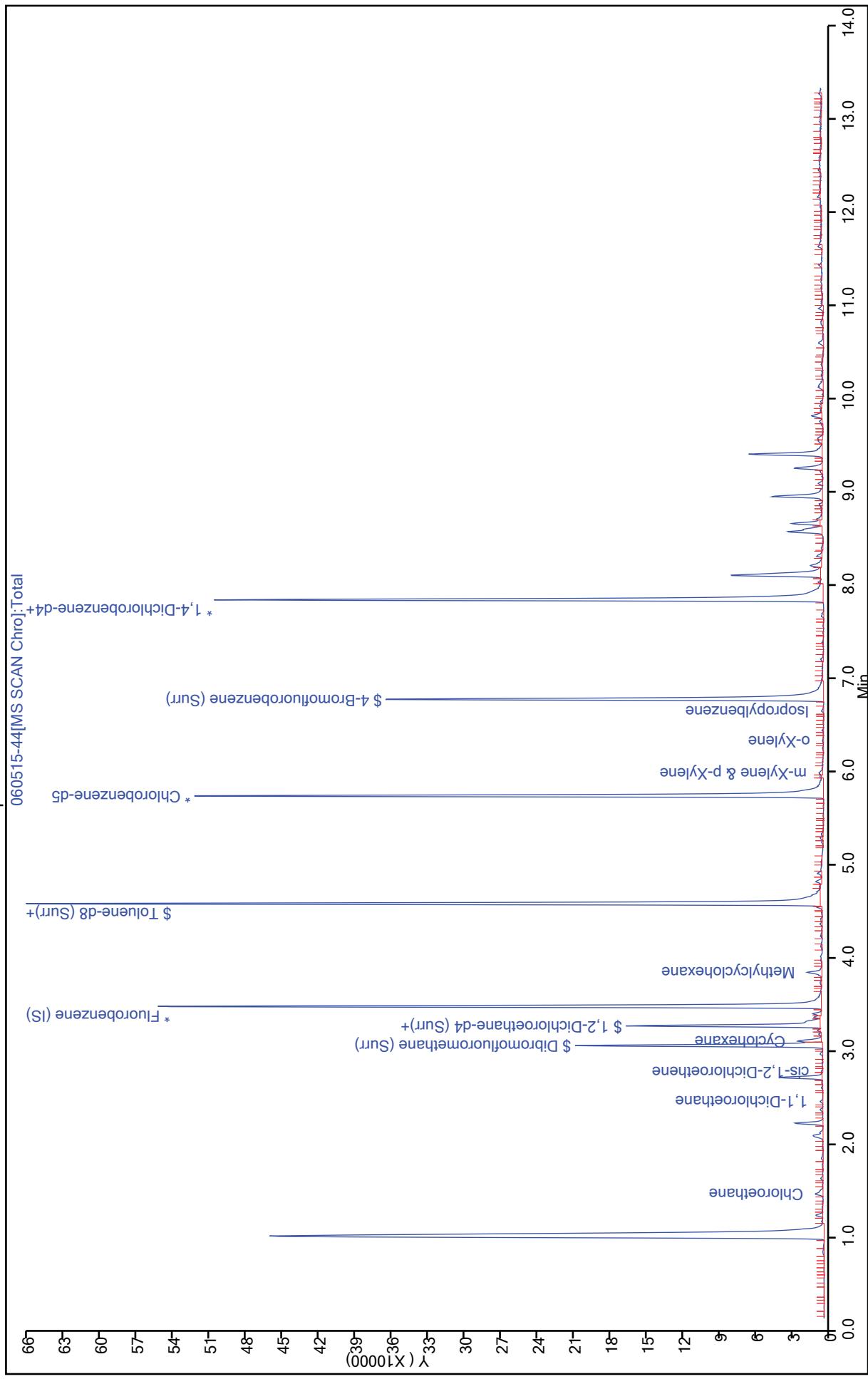
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL
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Report Date: 10-Jun-2015 10:01:57

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D  
Injection Date: 06-Jun-2015 07:03:30  
Lims ID: 490-79645-A-4  
Client ID: DUP-01-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 17  
Instrument ID: HP32  
Lab Sample ID: 490-79645-4  
Dil. Factor: 1.0000  
ALS Bottle#: 44  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D

Injection Date: 06-Jun-2015 07:03:30

Instrument ID: HP32

Lims ID: 490-79645-A-4

Lab Sample ID: 490-79645-4

Client ID: DUP-01-060115

Operator ID: EML

ALS Bottle#: 44 Worklist Smp#: 17

Purge Vol: 10.000 mL

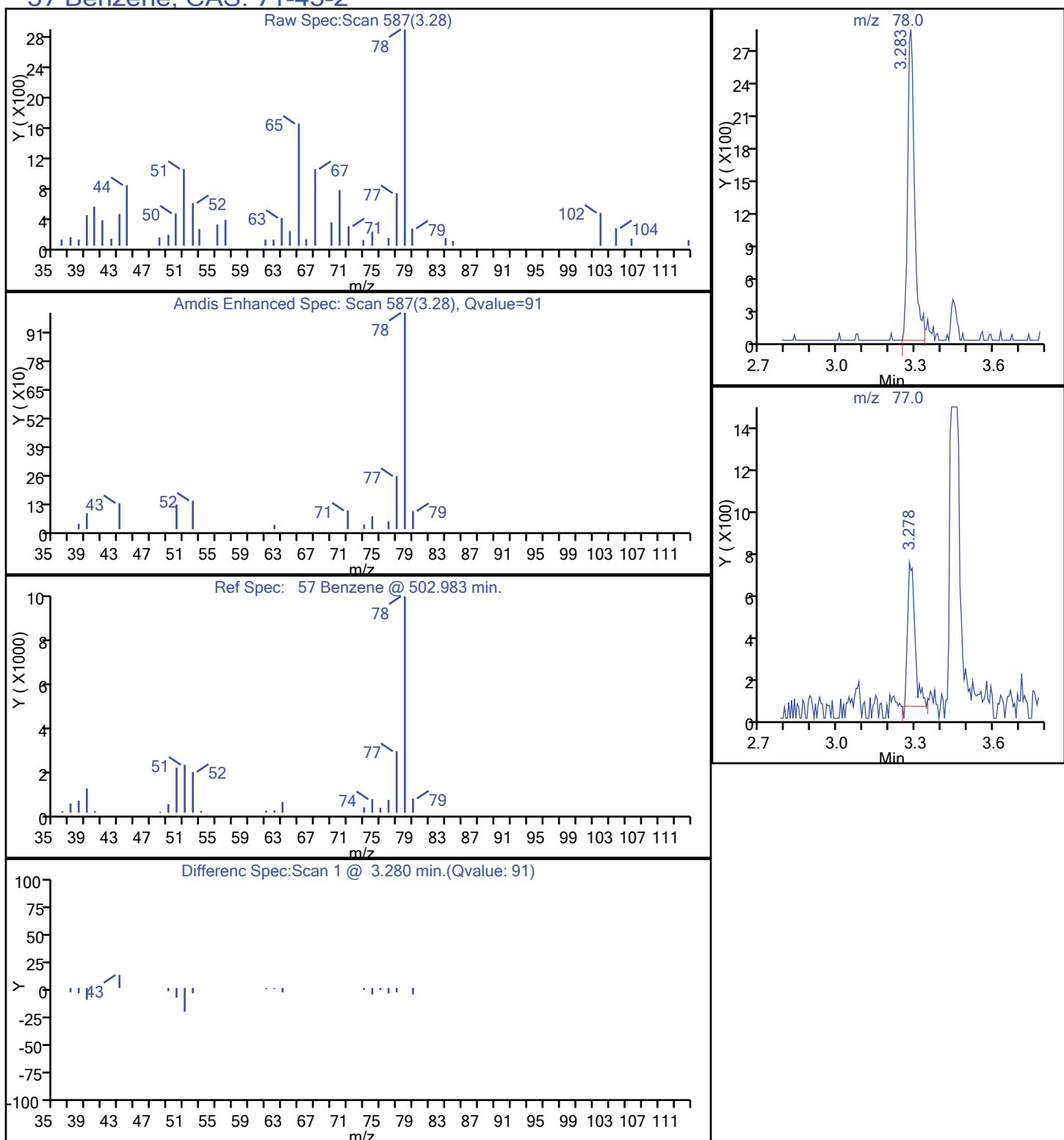
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**57 Benzene, CAS: 71-43-2**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D

Injection Date: 06-Jun-2015 07:03:30

Instrument ID: HP32

Lims ID: 490-79645-A-4

Lab Sample ID: 490-79645-4

Client ID: DUP-01-060115

ALS Bottle#: 44 Worklist Smp#: 17

Operator ID: EML

Dil. Factor: 1.0000

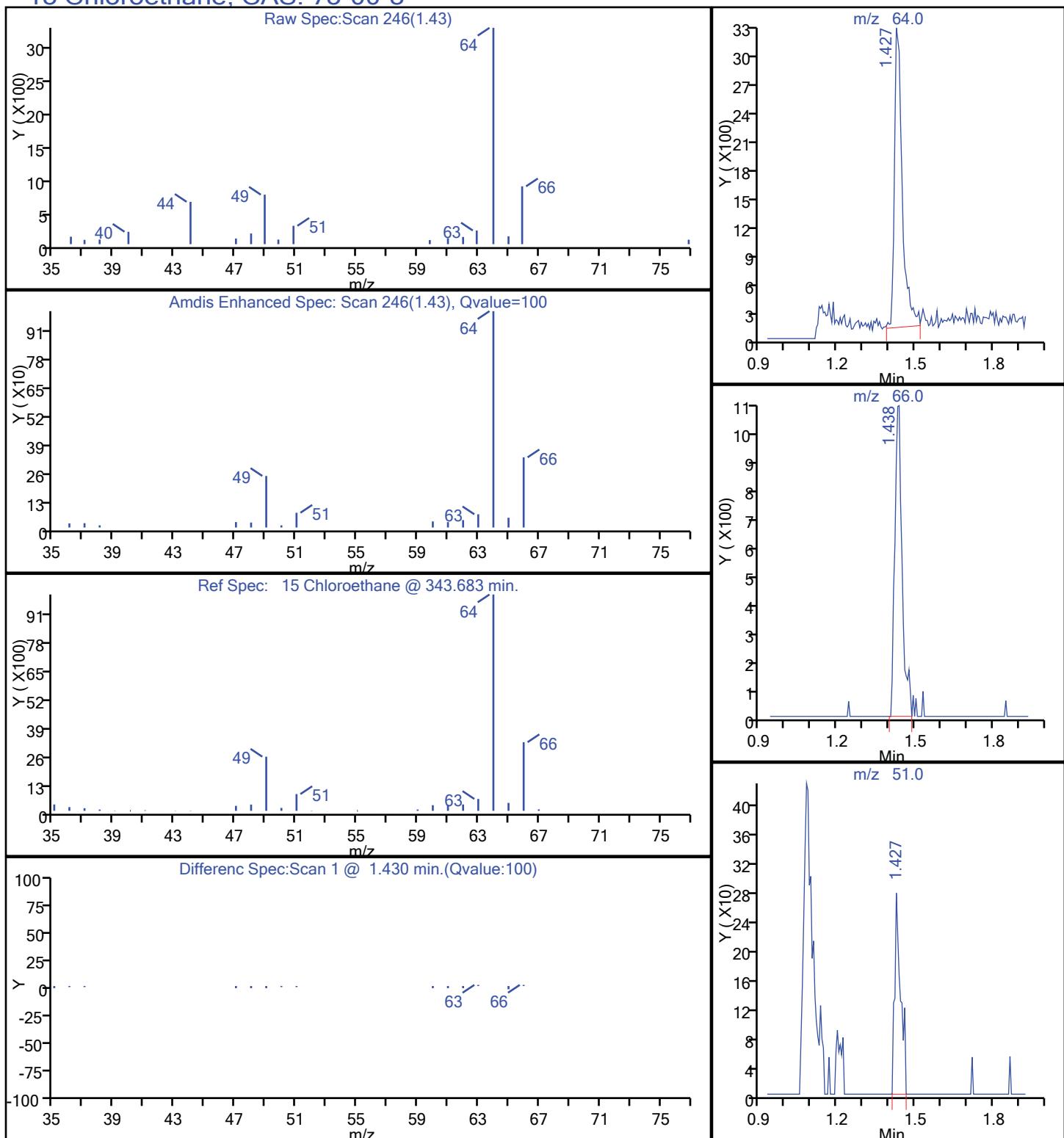
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

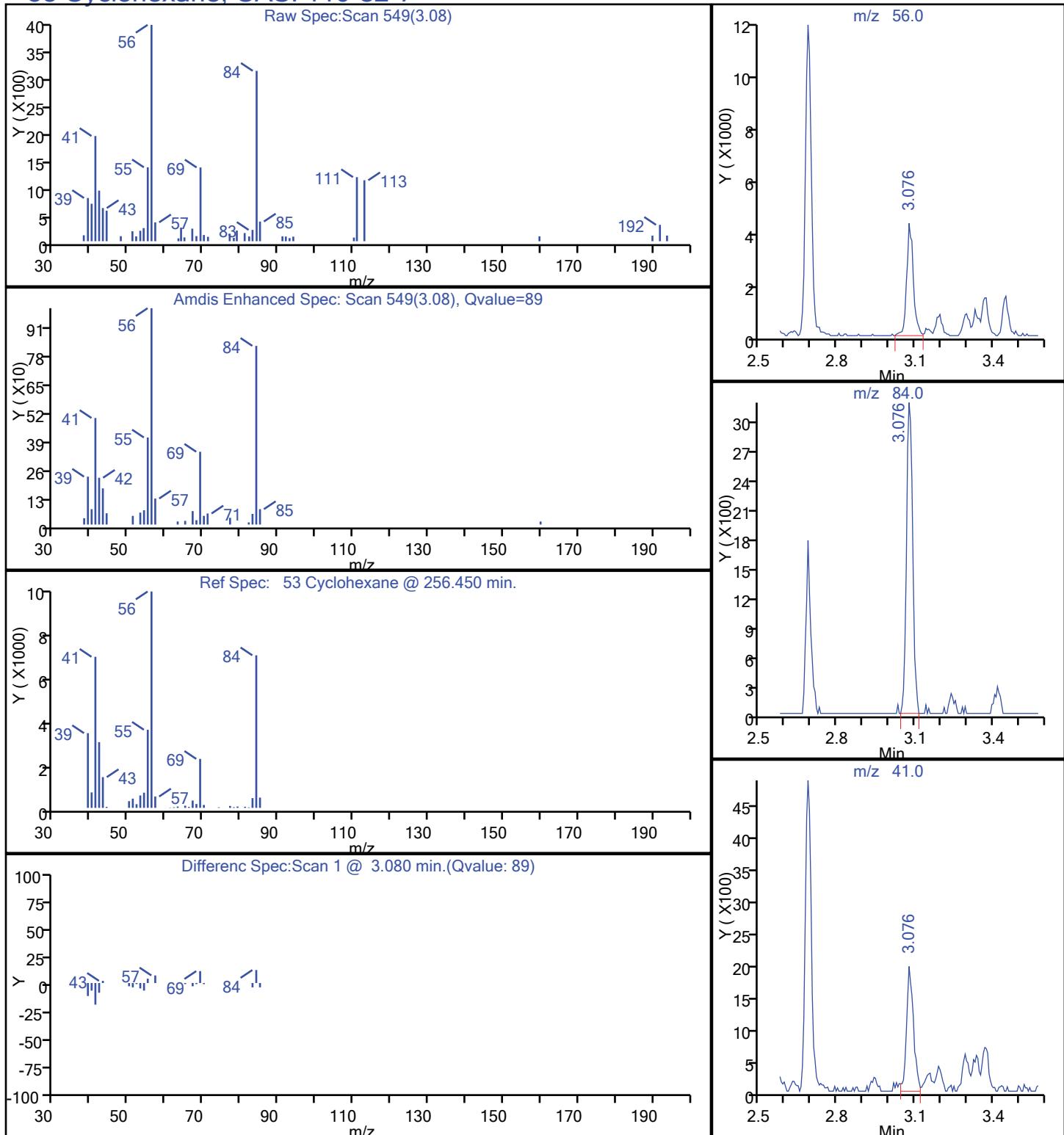
Method: 8260HP32

Detector: MS SCAN

Column:

**15 Chloroethane, CAS: 75-00-3**

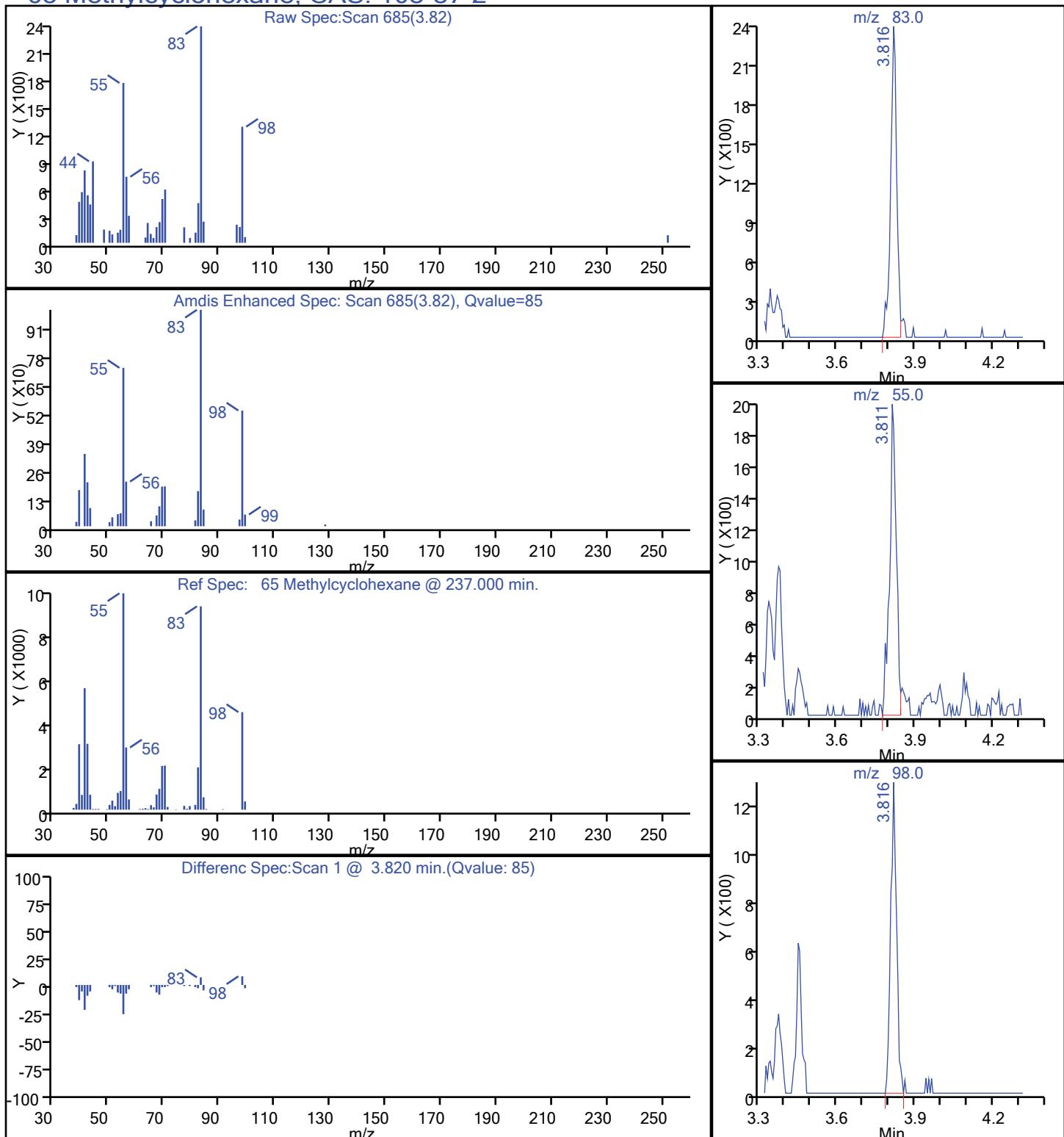
TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D  
 Injection Date: 06-Jun-2015 07:03:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Operator ID: EML ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**53 Cyclohexane, CAS: 110-82-7**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D  
 Injection Date: 06-Jun-2015 07:03:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Operator ID: EML ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D

Injection Date: 06-Jun-2015 07:03:30

Instrument ID: HP32

Lims ID: 490-79645-A-4

Lab Sample ID: 490-79645-4

Client ID: DUP-01-060115

Operator ID: EML

ALS Bottle#: 44 Worklist Smp#: 17

Purge Vol: 10.000 mL

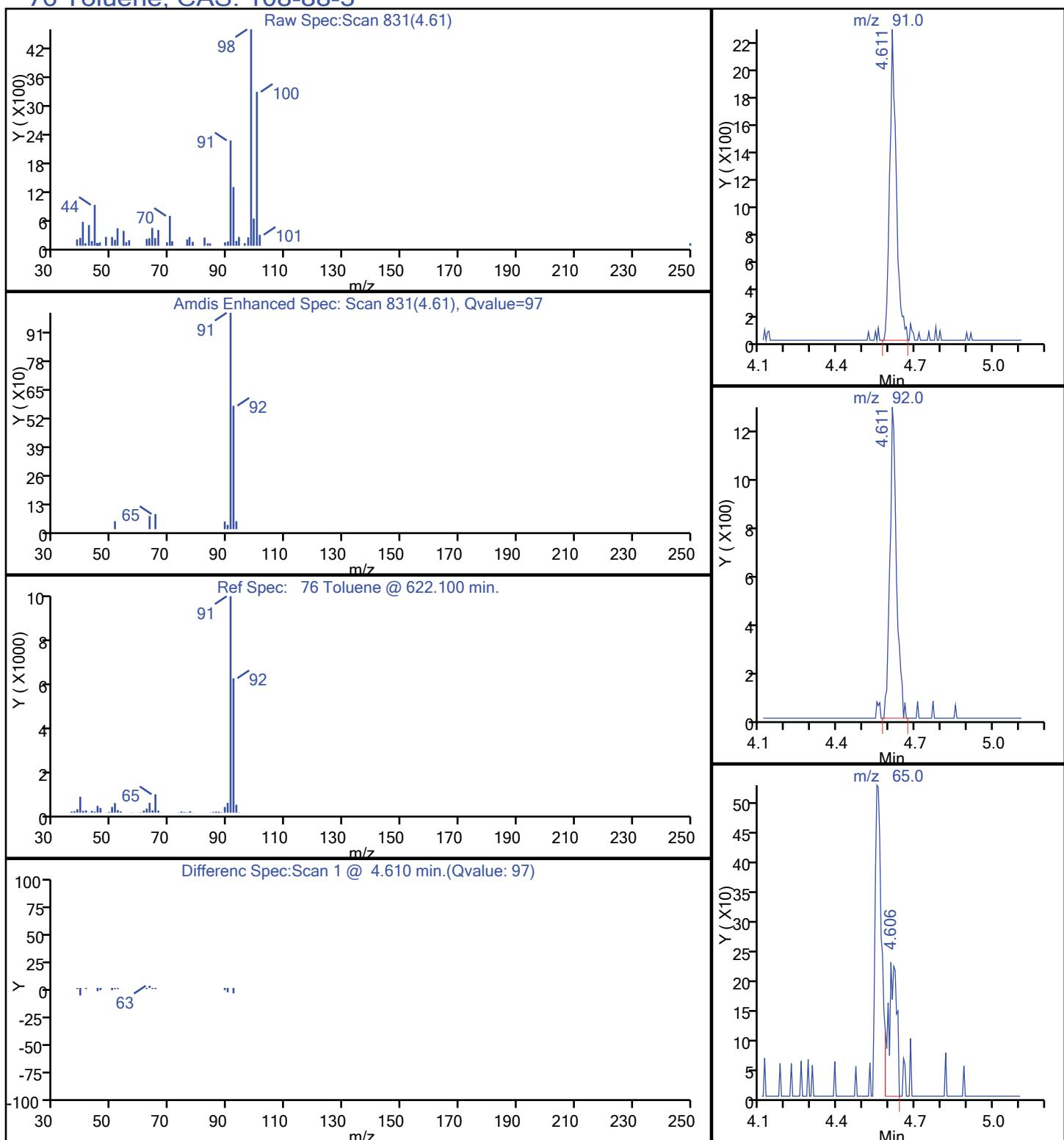
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

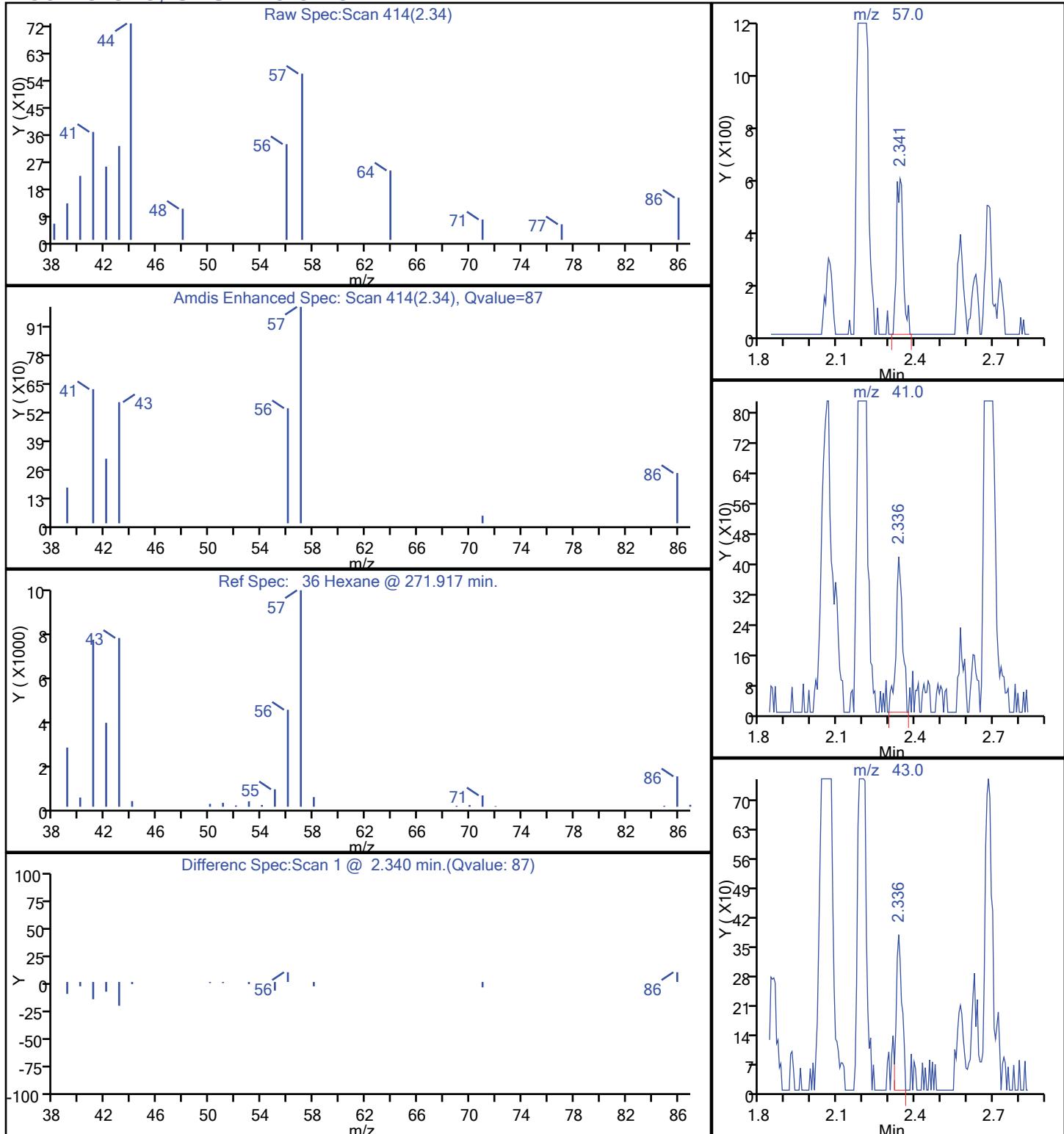
MS SCAN

**76 Toluene, CAS: 108-88-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D  
 Injection Date: 06-Jun-2015 07:03:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Operator ID: EML ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 36 Hexane, CAS: 110-54-3



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D

Injection Date: 06-Jun-2015 07:03:30

Instrument ID: HP32

Lims ID: 490-79645-A-4

Lab Sample ID: 490-79645-4

Client ID: DUP-01-060115

Operator ID: EML

ALS Bottle#: 44 Worklist Smp#: 17

Purge Vol: 10.000 mL

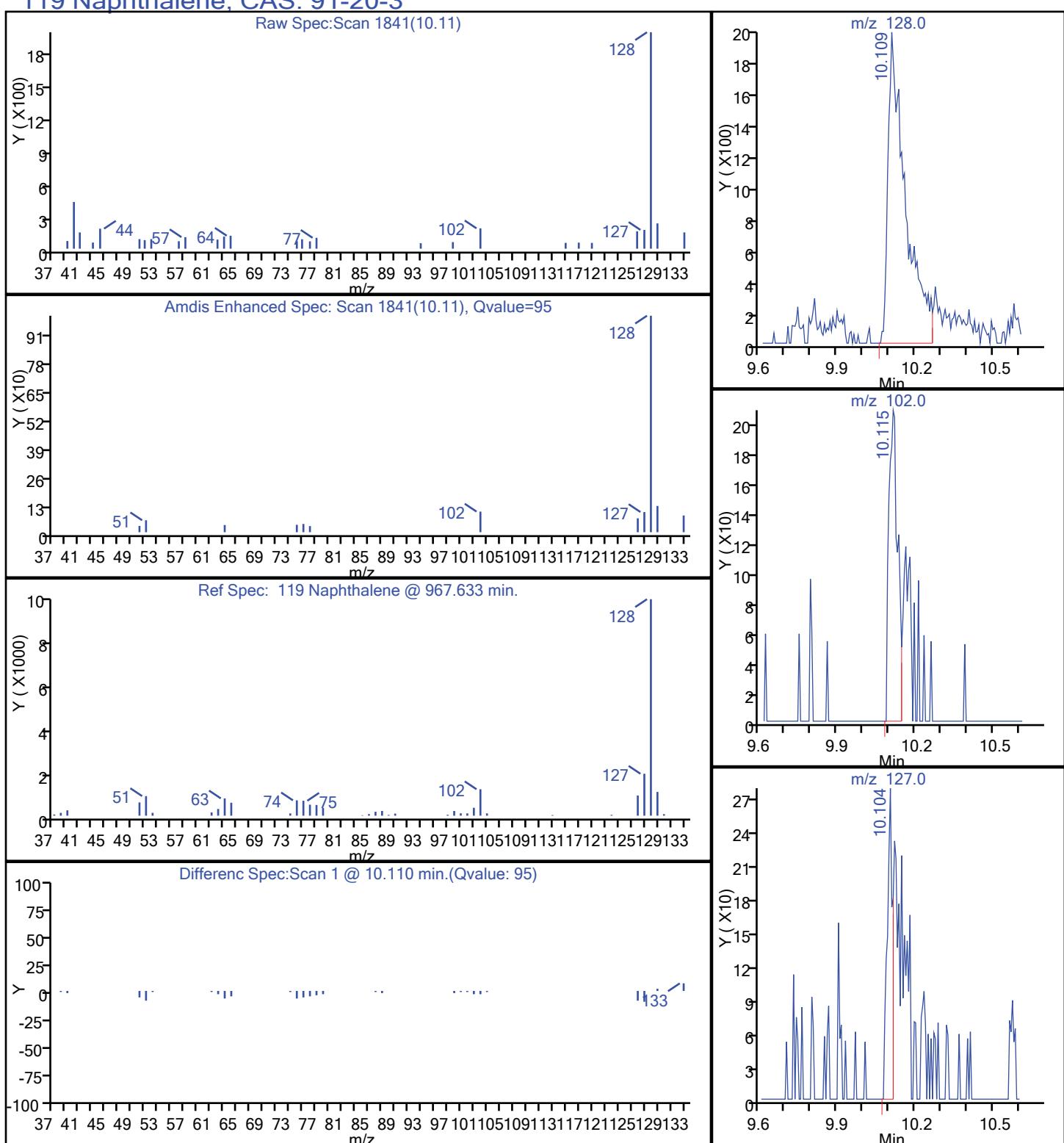
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

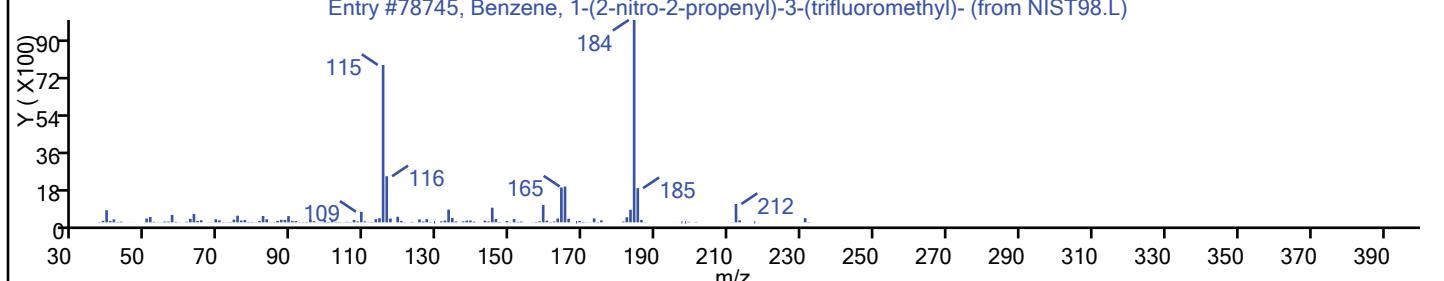
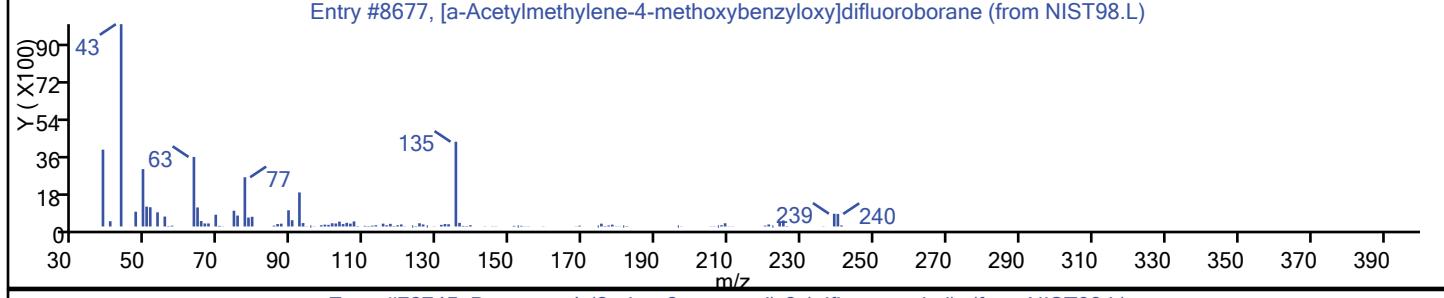
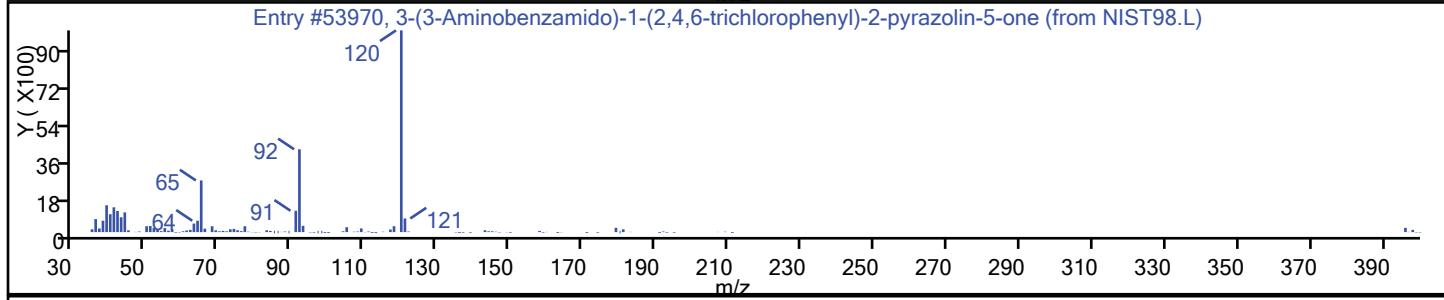
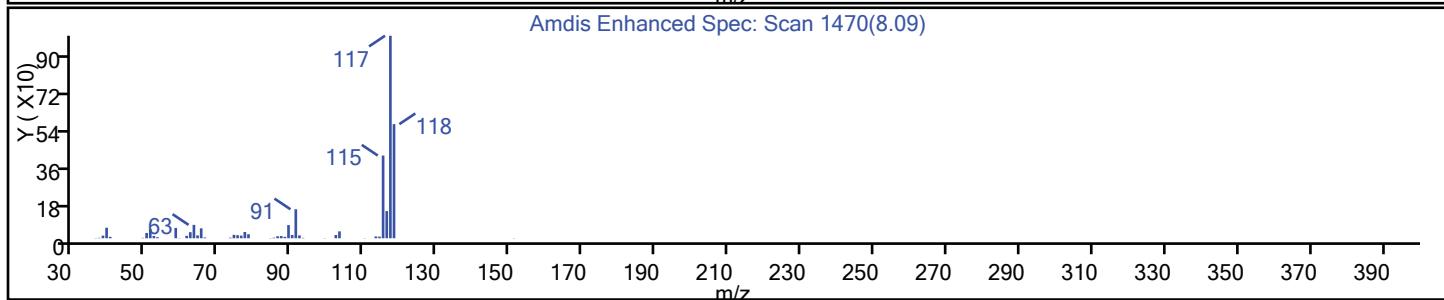
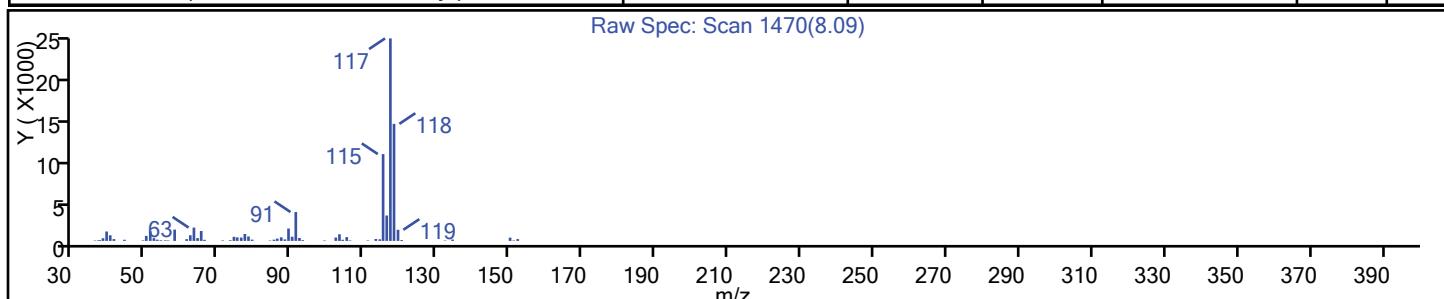
Detector: MS SCAN

**119 Naphthalene, CAS: 91-20-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D  
 Injection Date: 06-Jun-2015 07:03:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-4 Lab Sample ID: 490-79645-4  
 Client ID: DUP-01-060115  
 Operator ID: EML ALS Bottle#: 44 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
trans-Cinnamyl bromide	26146-77-0	NIST98	53970	C9H9Br	196	72
Deltacyclene	7785-10-6	NIST98.L	8677	C9H10	118	53
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi	4439-45-6	NIST98.L	78745	C18H18	234	53



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-44.D

Injection Date: 06-Jun-2015 07:03:30

Instrument ID: HP32

Lims ID: 490-79645-A-4

Lab Sample ID: 490-79645-4

Client ID: DUP-01-060115

Operator ID: EML

ALS Bottle#: 44 Worklist Smp#: 17

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

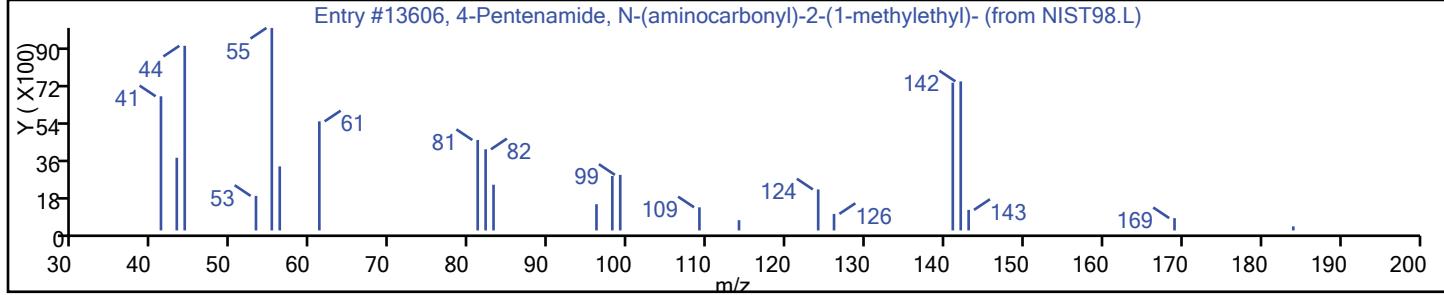
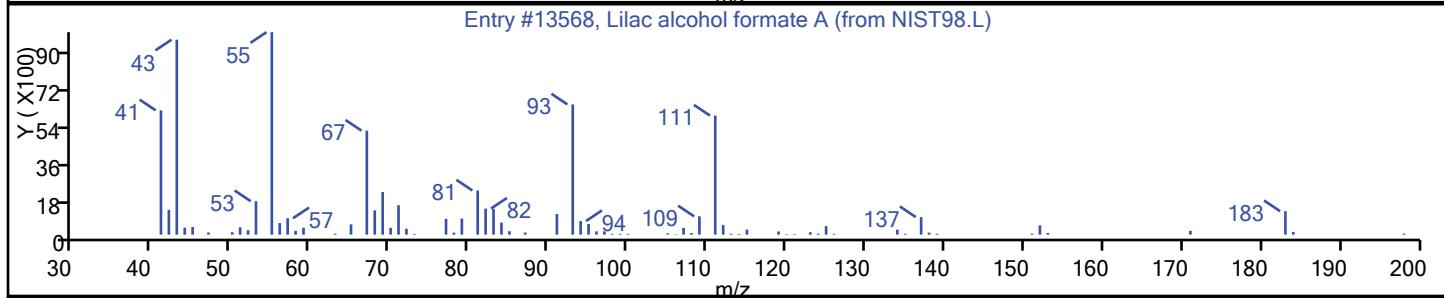
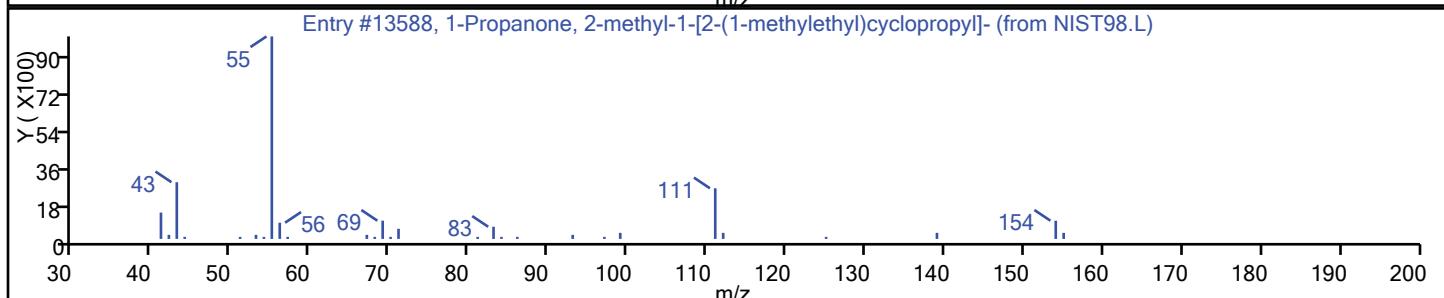
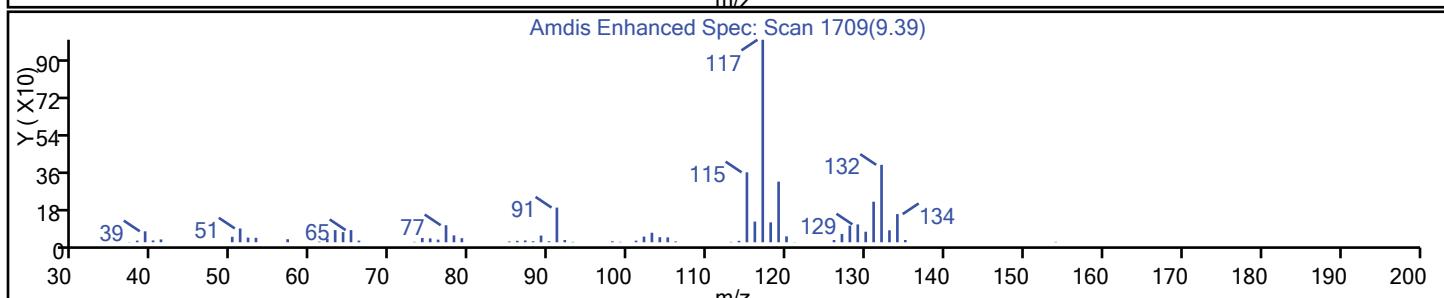
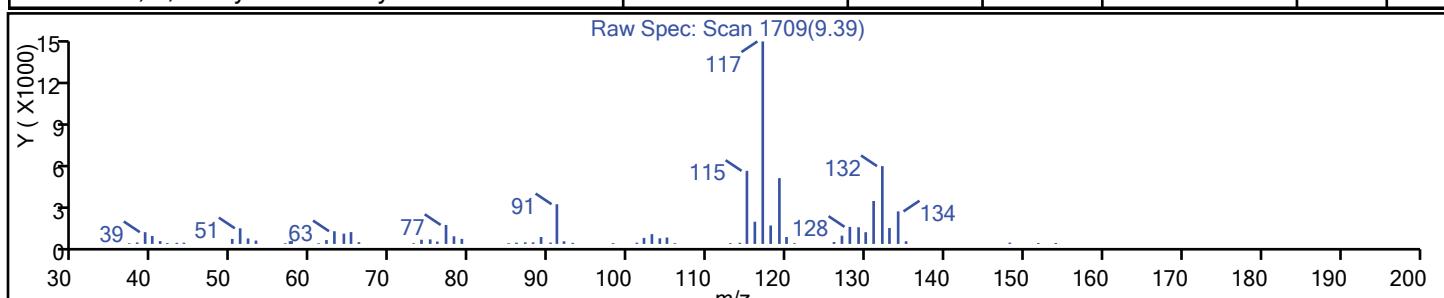
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-ethenyl-4-ethyl-	3454-07-7	NIST98	13588	C10H12	132	89
3-Phenylbut-1-ene	934-10-1	NIST98.L	13568	C10H12	132	87
1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	NIST98.L	13606	C10H12	132	83



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-27-060115

Lab Sample ID: 490-79645-5

Matrix: Ground Water

Lab File ID: 060515-45.D

Analysis Method: 8260C

Date Collected: 06/01/2015 13:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 07:30

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	3.0		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	79		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.30	J	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	1.6		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.25	J	0.50	0.24
107-06-2	1,2-Dichloroethane	0.22	J	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	2.7		1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.89		0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-27-060115

Lab Sample ID: 490-79645-5

Matrix: Ground Water

Lab File ID: 060515-45.D

Analysis Method: 8260C

Date Collected: 06/01/2015 13:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 07:30

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	114		70-130
1868-53-7	Dibromofluoromethane (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: OB-27-060115 Lab Sample ID: 490-79645-5  
 Matrix: Ground Water Lab File ID: 060515-45.D  
 Analysis Method: 8260C Date Collected: 06/01/2015 13:45  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 07:30  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 254074 Units: ug/L  
 Number TICs Found: 15 TIC Result Total: 121.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		2.5	J
26146-77-0	trans-Cinnamyl bromide	8.08	12	J N
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	8.55	10	J N
767-58-8	Indan, 1-methyl-	8.64	8.2	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.93	12	J N
3454-07-7	Benzene, 1-ethenyl-4-ethyl-	9.23	5.5	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.38	21	J N
4489-84-3	Benzene, (3-methyl-2-butenyl)-	9.73	5.9	J N
4706-89-2	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	9.79	7.6	J N
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethyl-	9.86	5.0	J N
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl-	9.90	7.9	J N
91-20-3	Naphthalene	10.08	5.7	
1685-82-1	1H-Indene, 2,3-dihydro-4,6-dimethyl-	10.78	7.2	J N
21564-91-0	Naphthalene, 1,2,3,4-tetrahydro-1,5-dime	11.02	6.3	J N
25419-33-4	Naphthalene, 1,2,3,4-tetrahydro-1,8-dime	11.44	4.8	J N

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-45.D  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:30:30 ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-5  
 Misc. Info.: 490-0056110-018  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:04:22 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:05:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.446	0.002	99	433308	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	83	310869	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	93	161488	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.027	0.002	94	98695	23.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.239	0.002	0	89318	24.3	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.551	0.002	92	407252	26.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.750	0.002	95	136207	28.5	
12 Vinyl chloride	62	1.216	1.216	0.000	31	396	0.0812	
15 Chloroethane	64	1.428	1.428	0.000	99	245109	79.2	
23 Acetone	58	1.842	1.842	0.000	1	190	0.0608	
37 1,1-Dichloroethane	63	2.430	2.424	0.006	95	2063	0.2539	
42 cis-1,2-Dichloroethene	61	2.751	2.745	0.006	77	2196	0.3048	
53 Cyclohexane	56	3.078	3.077	0.001	87	12965	1.64	
57 Benzene	78	3.279	3.273	0.006	93	59115	3.00	
59 1,2-Dichloroethane	62	3.285	3.284	0.001	75	1121	0.2173	
65 Methylcyclohexane	83	3.818	3.818	0.000	85	7934	0.8934	
89 Ethylbenzene	91	5.848	5.832	0.016	80	1171	0.0554	
90 m-Xylene & p-Xylene	91	5.963	5.935	0.028	0	3650	0.2207	
91 o-Xylene	91	6.300	6.278	0.022	95	3024	0.1841	
94 Isopropylbenzene	105	6.616	6.610	0.006	95	55127	2.68	
110 1,4-Dichlorobenzene	146	7.852	7.846	0.006	34	745	0.0743	
S 134 Xylenes, Total	1				0		0.4048	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-45.D  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:30:30 ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-5  
 Misc. Info.: 490-0056110-018  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 10:04:22 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:05:22

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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Naphthalene	10.078	41409	5.71
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## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
26146-77-0	trans-Cinnamyl bromide							
8.080	429493	12.2	3	59	53970	C9H9Br	196	
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-							
8.548	356878	10.1	3	95	14406	C10H14	134	
767-58-8	Indan, 1-methyl-							
8.641	288946	8.19	3	87	13567	C10H12	132	
95-93-2	Benzene, 1,2,4,5-tetramethyl-							
8.929	424712	12.0	3	97	14355	C10H14	134	
3454-07-7	Benzene, 1-ethenyl-4-ethyl-							
9.234	194498	5.51	3	87	13588	C10H12	132	
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-							
9.381	741414	21.0	3	94	13603	C10H12	132	
4489-84-3	Benzene, (3-methyl-2-butenyl)-							
9.730	206779	5.86	3	94	20726	C11H14	146	
4706-89-2	Benzene, 2,4-dimethyl-1-(1-methylethyl)-							
9.789	266669	7.56	3	64	21851	C11H16	148	
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethyl-							
9.860	176914	5.01	3	94	20743	C11H14	146	

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
9.898	278216	7.89	3	95	20746	C11H14	146	
10.780	252398	7.15	3	91	20745	C11H14	146	
11.020	222588	6.31	3	90	29456	C12H16	160	
11.178	150843	4.28	3	58	29418	C12H16	160	
11.439	170799	4.84	3	90	29463	C12H16	160	

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
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\* 3 1,4-Dichlorobenzene-d4

7.824

881986

25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

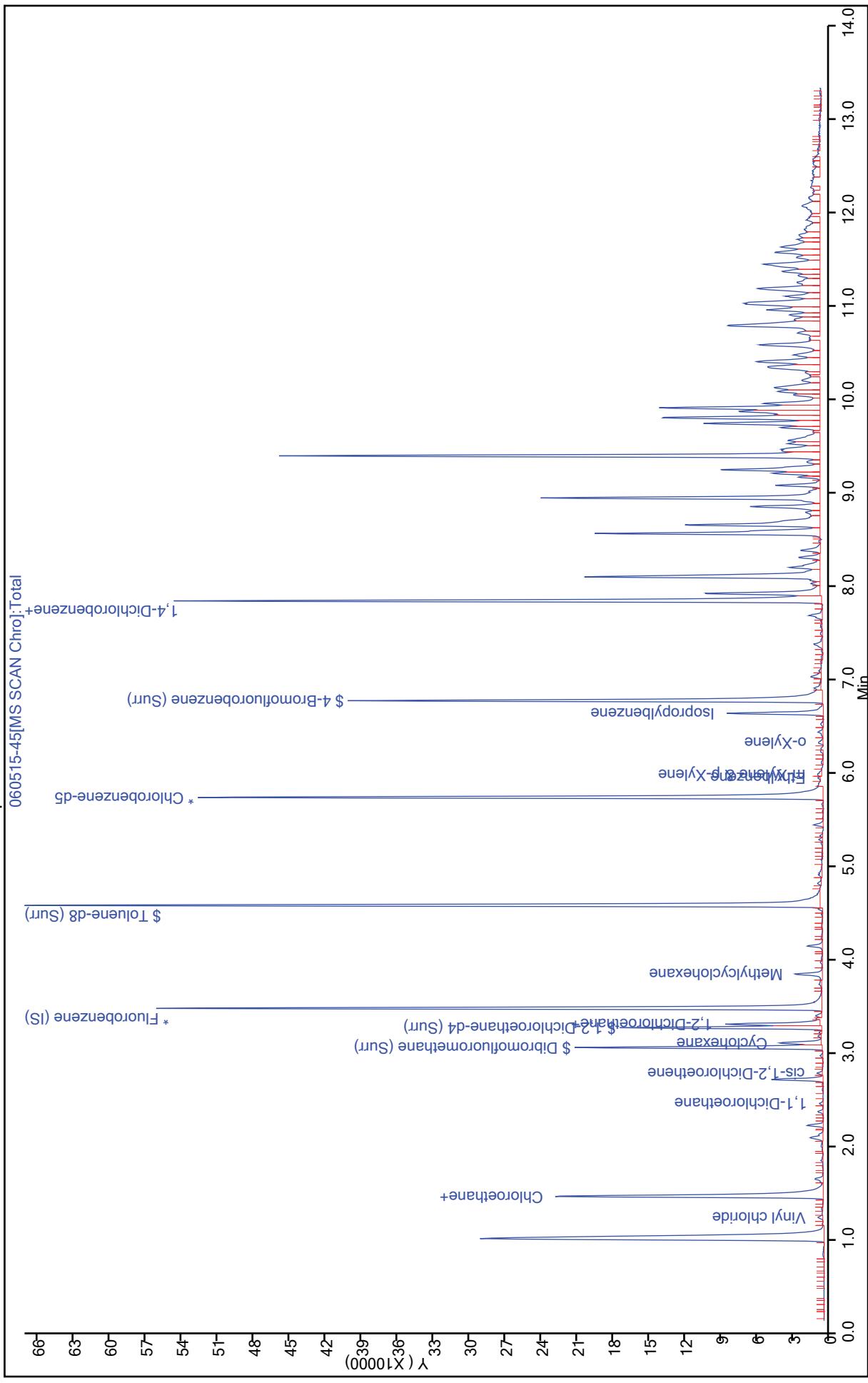
Run Reagent

Report Date: 10-Jun-2015 10:05:23

Chrom Revision: 2.2 14-May-2015 11:41:56

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Injection Date: 06-Jun-2015 07:30:30  
Lims ID: 490-79645-A-5  
Client ID: OB-27-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 18  
Instrument ID: HP32  
Lab Sample ID: 490-79645-5  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

ALS Bottle#: 45 Worklist Smp#: 18

Operator ID: EML

Dil. Factor: 1.0000

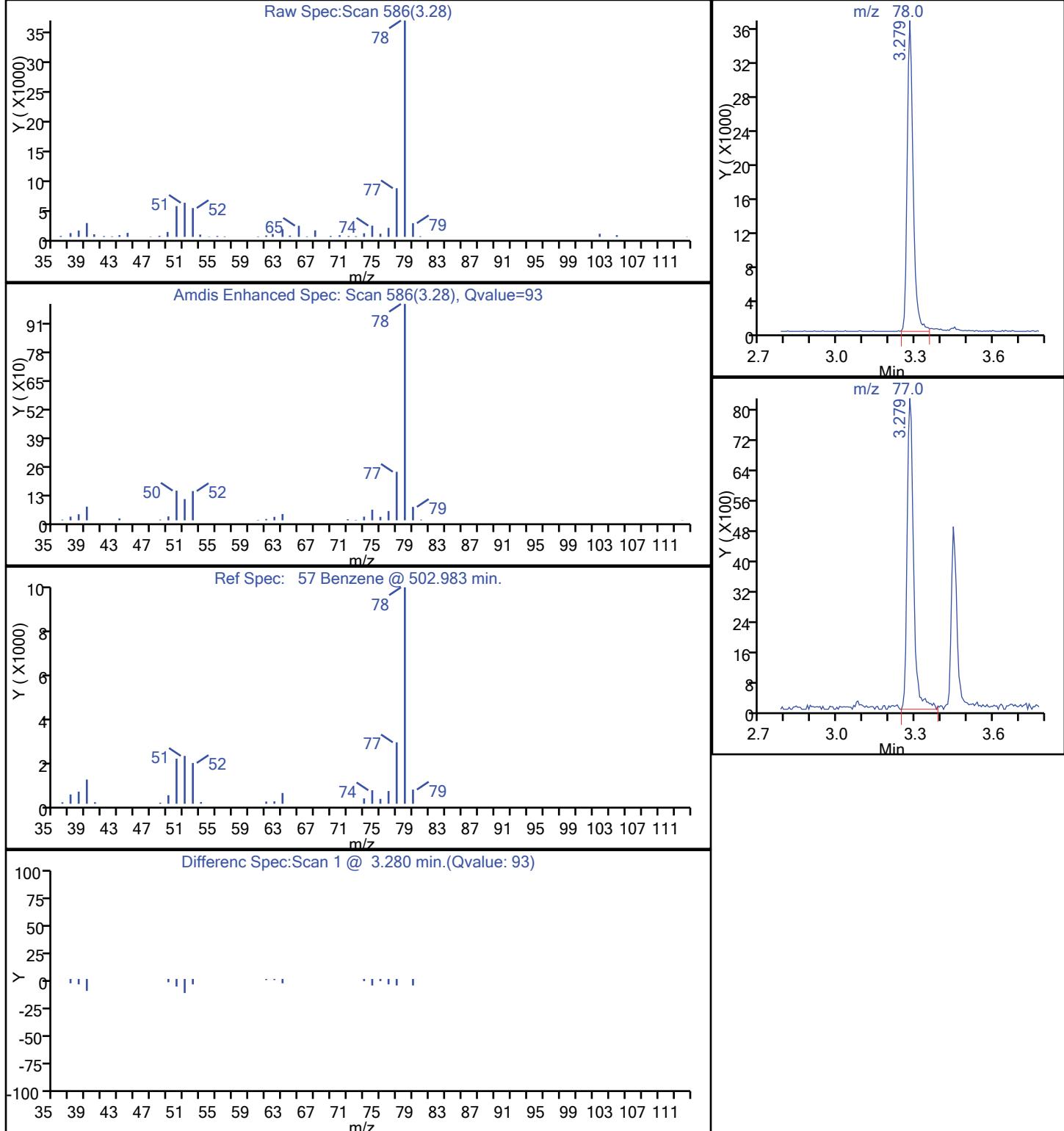
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

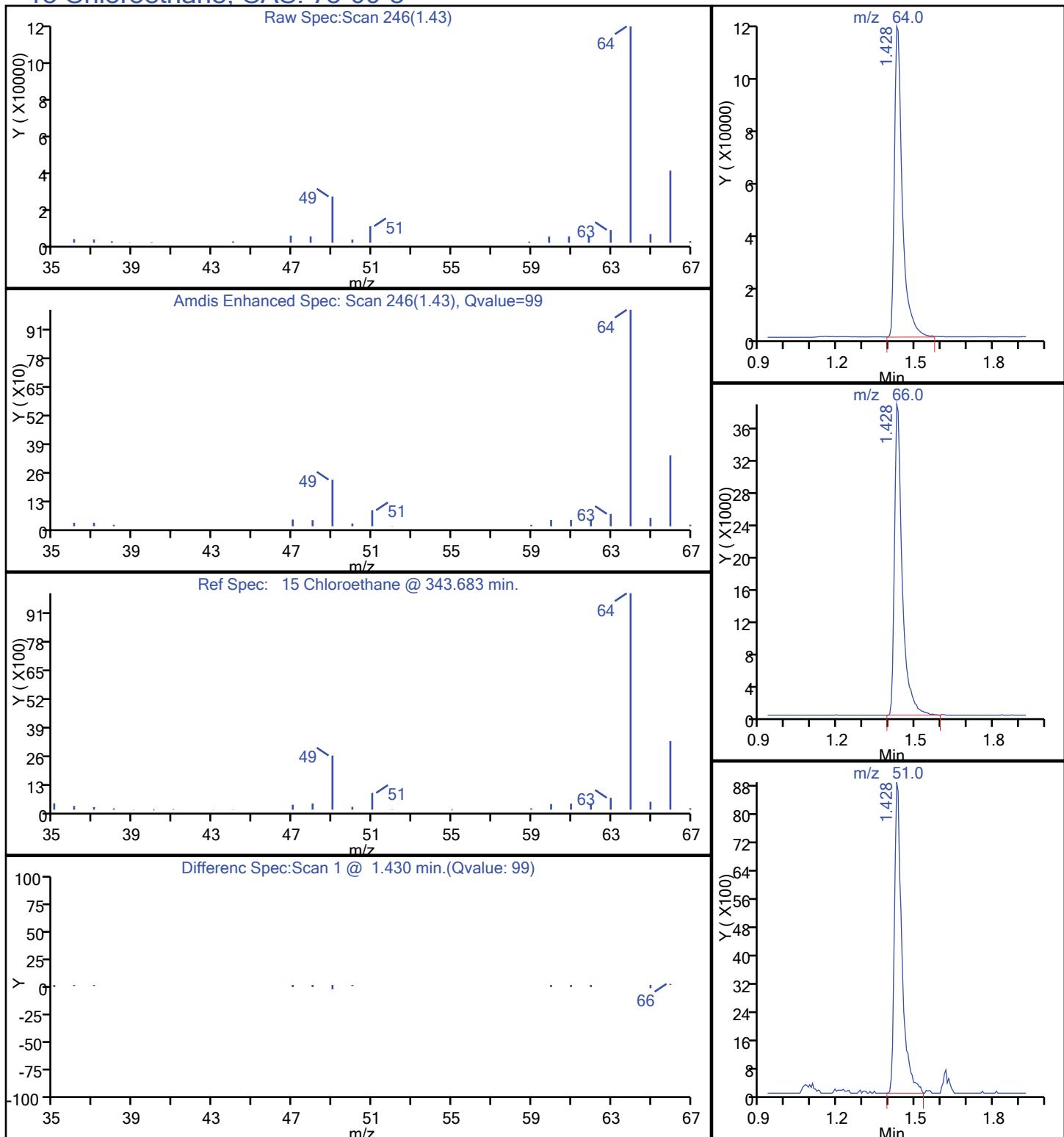
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**57 Benzene, CAS: 71-43-2**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 15 Chloroethane, CAS: 75-00-3



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

Operator ID: EML

ALS Bottle#: 45 Worklist Smp#: 18

Purge Vol: 10.000 mL

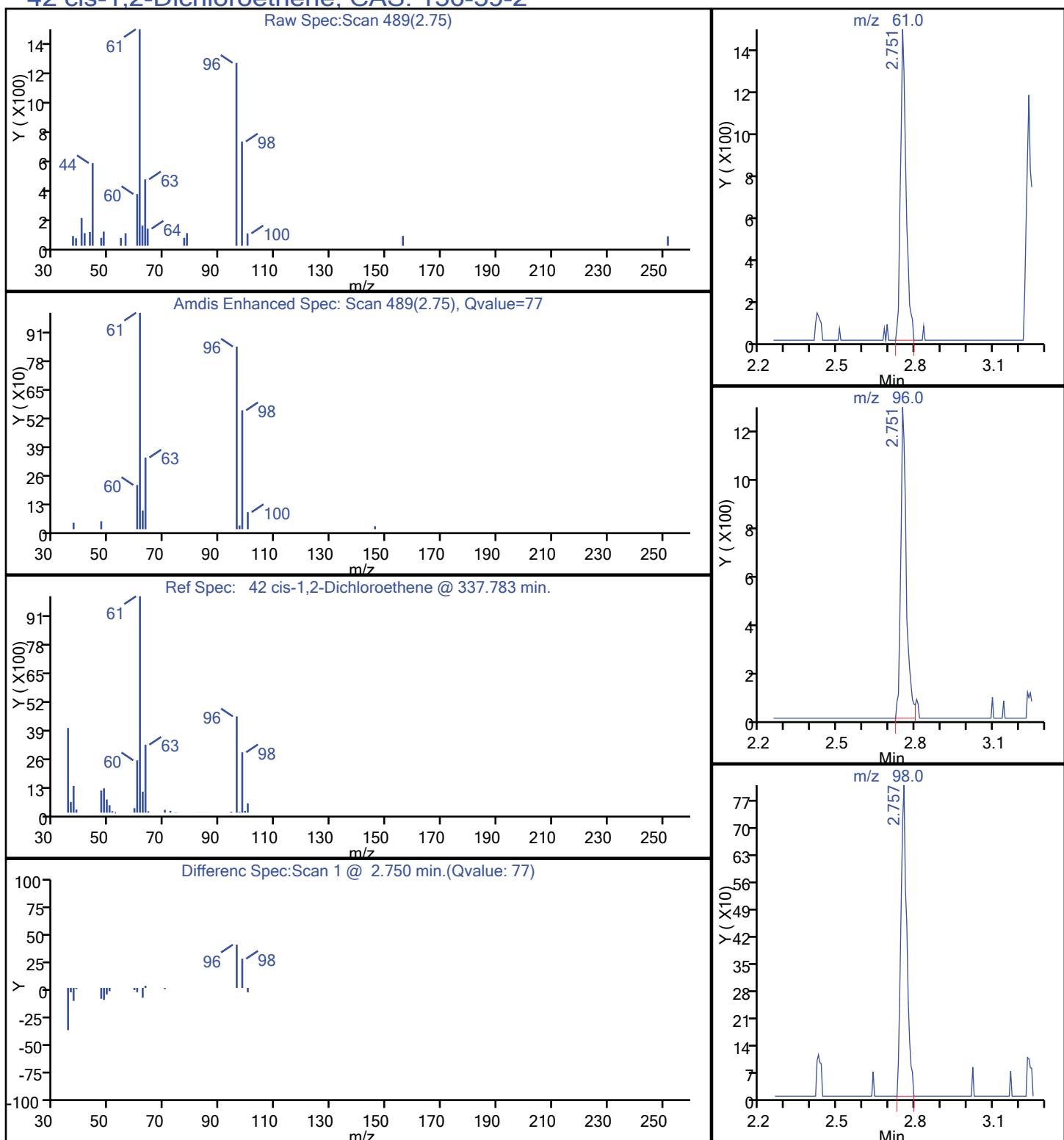
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

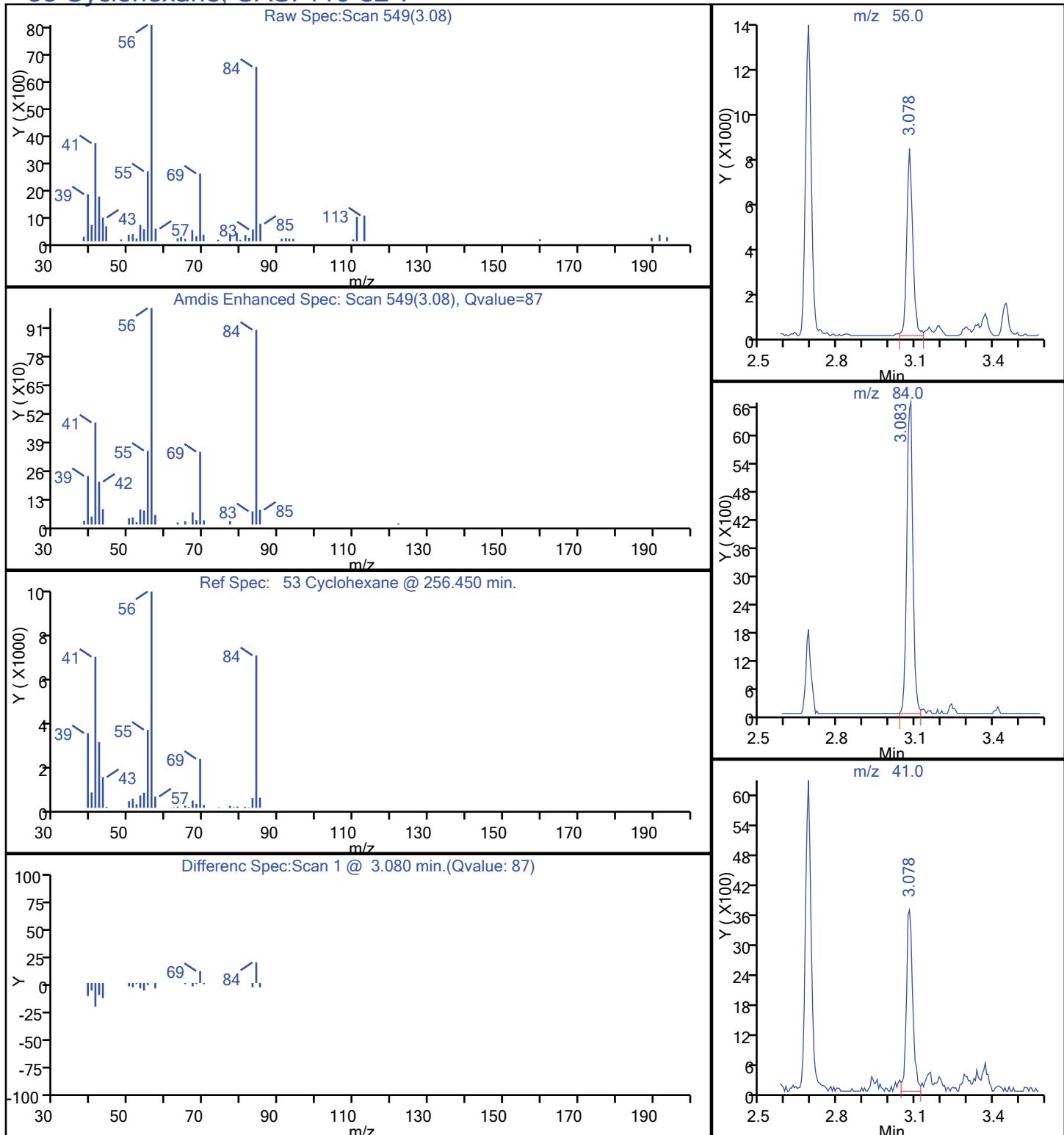
Column:

Detector MS SCAN

**42 cis-1,2-Dichloroethene, CAS: 156-59-2**

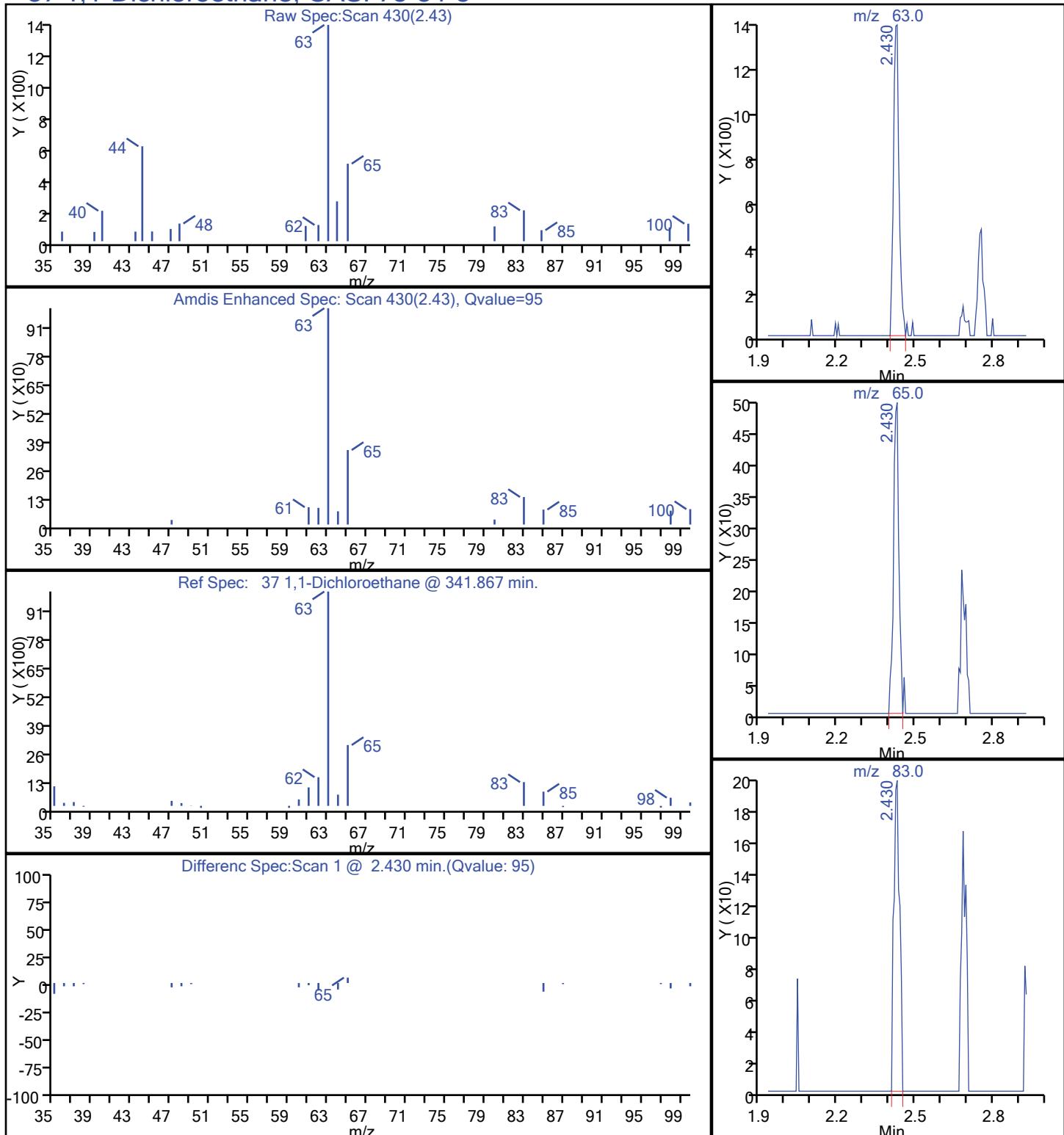
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 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 53 Cyclohexane, CAS: 110-82-7



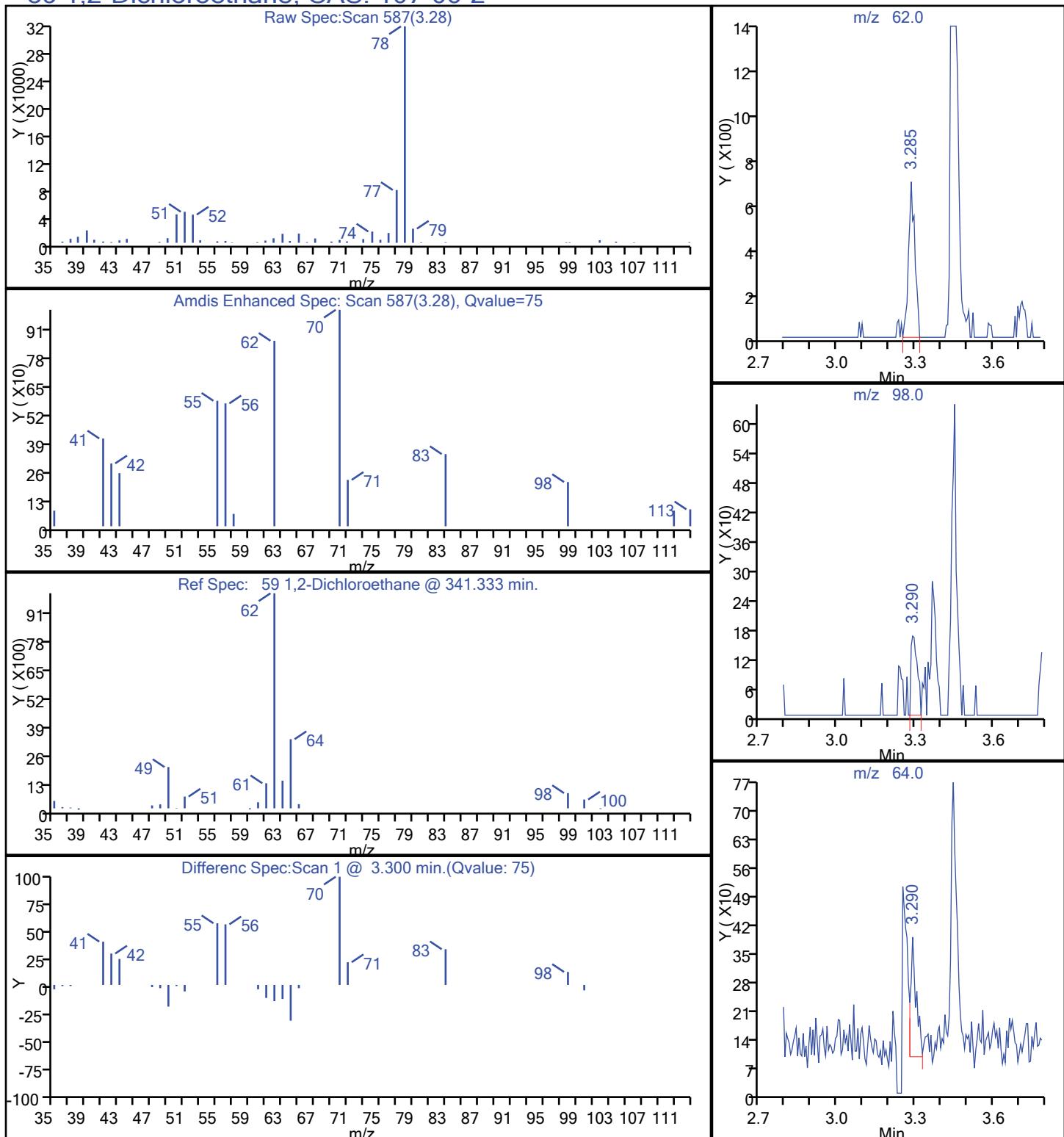
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 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 59 1,2-Dichloroethane, CAS: 107-06-2



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

ALS Bottle#: 45 Worklist Smp#: 18

Operator ID: EML

Dil. Factor: 1.0000

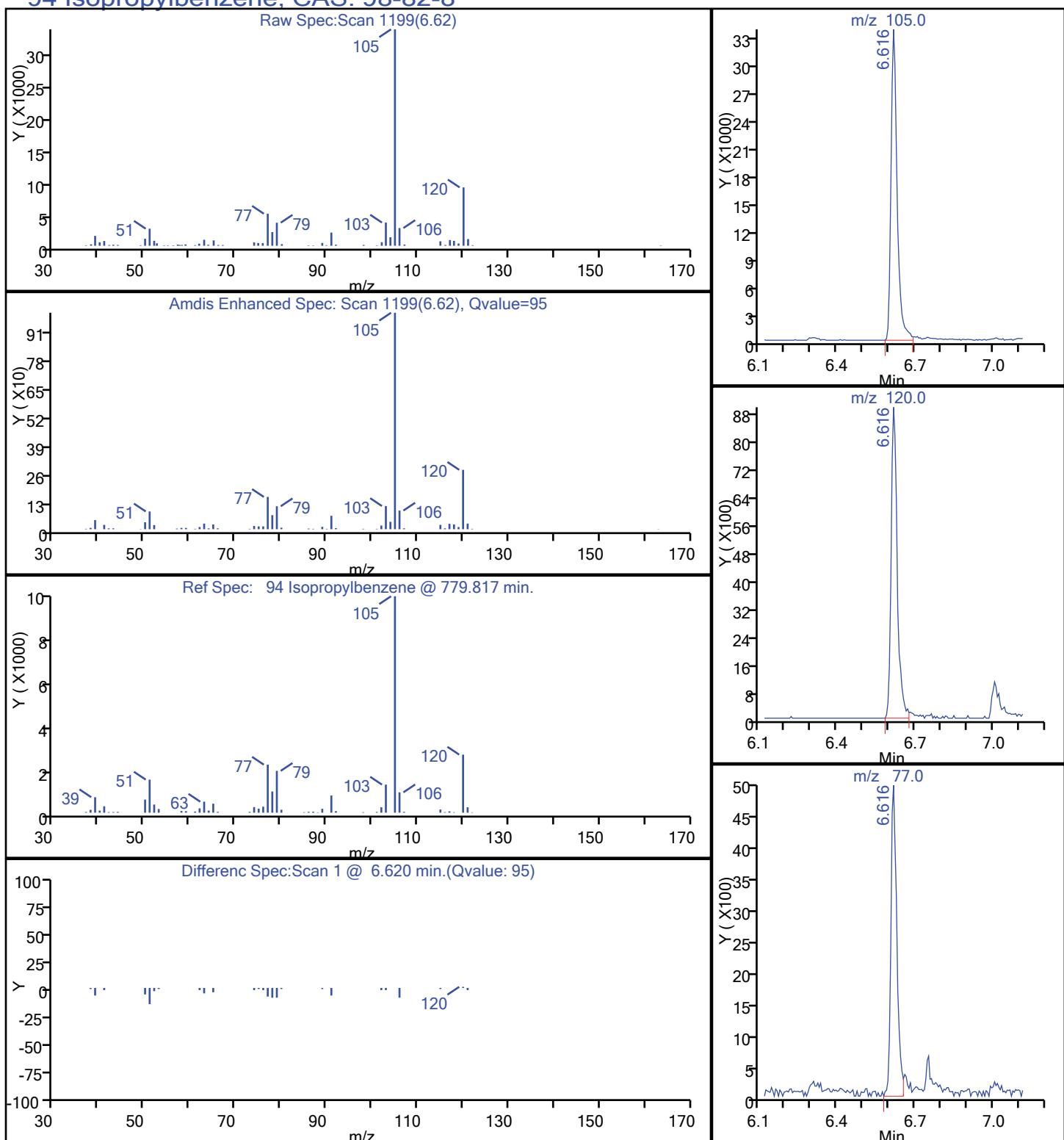
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

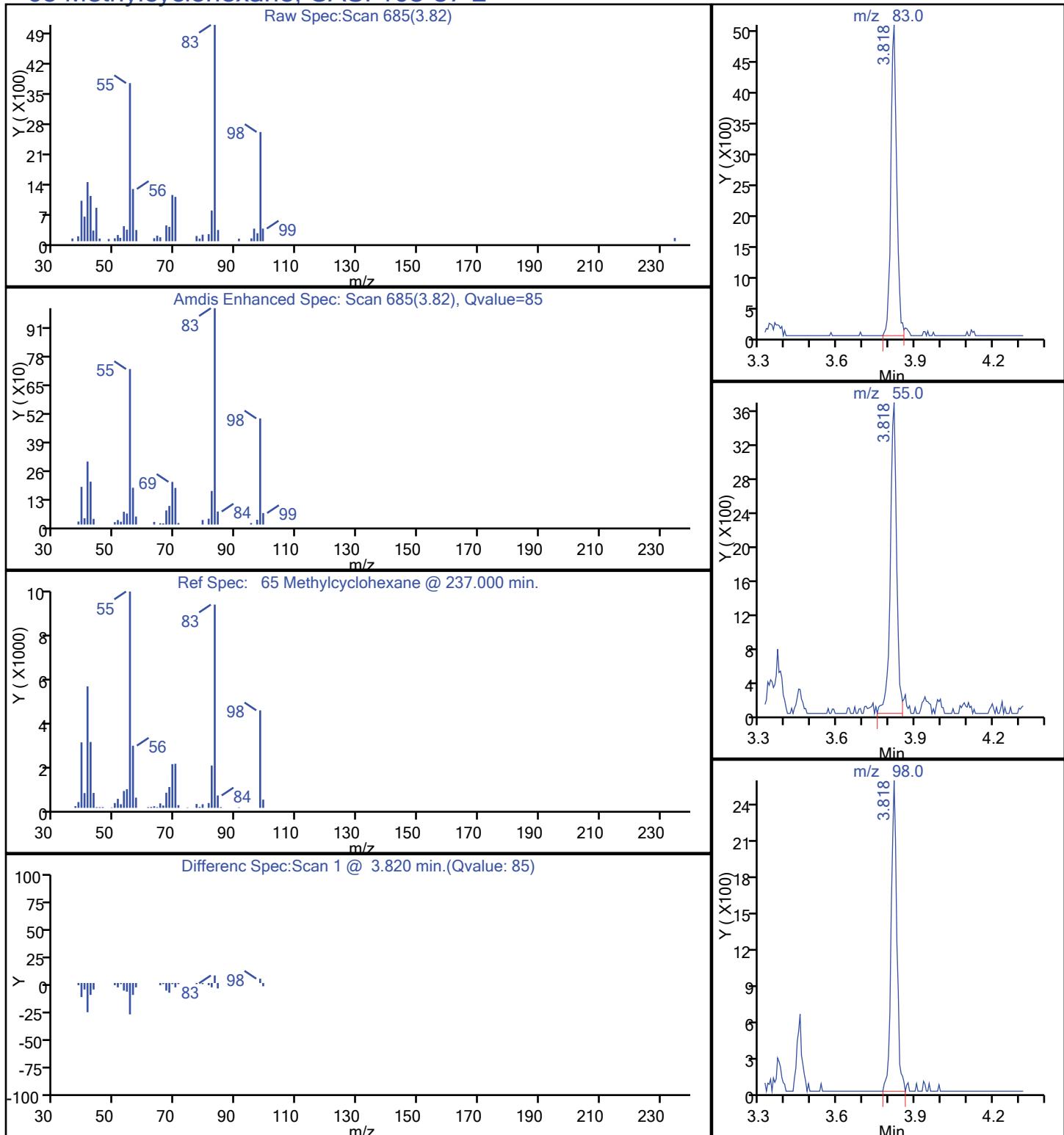
Column:

**94 Isopropylbenzene, CAS: 98-82-8**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

ALS Bottle#: 45 Worklist Smp#: 18

Operator ID: EML

Dil. Factor: 1.0000

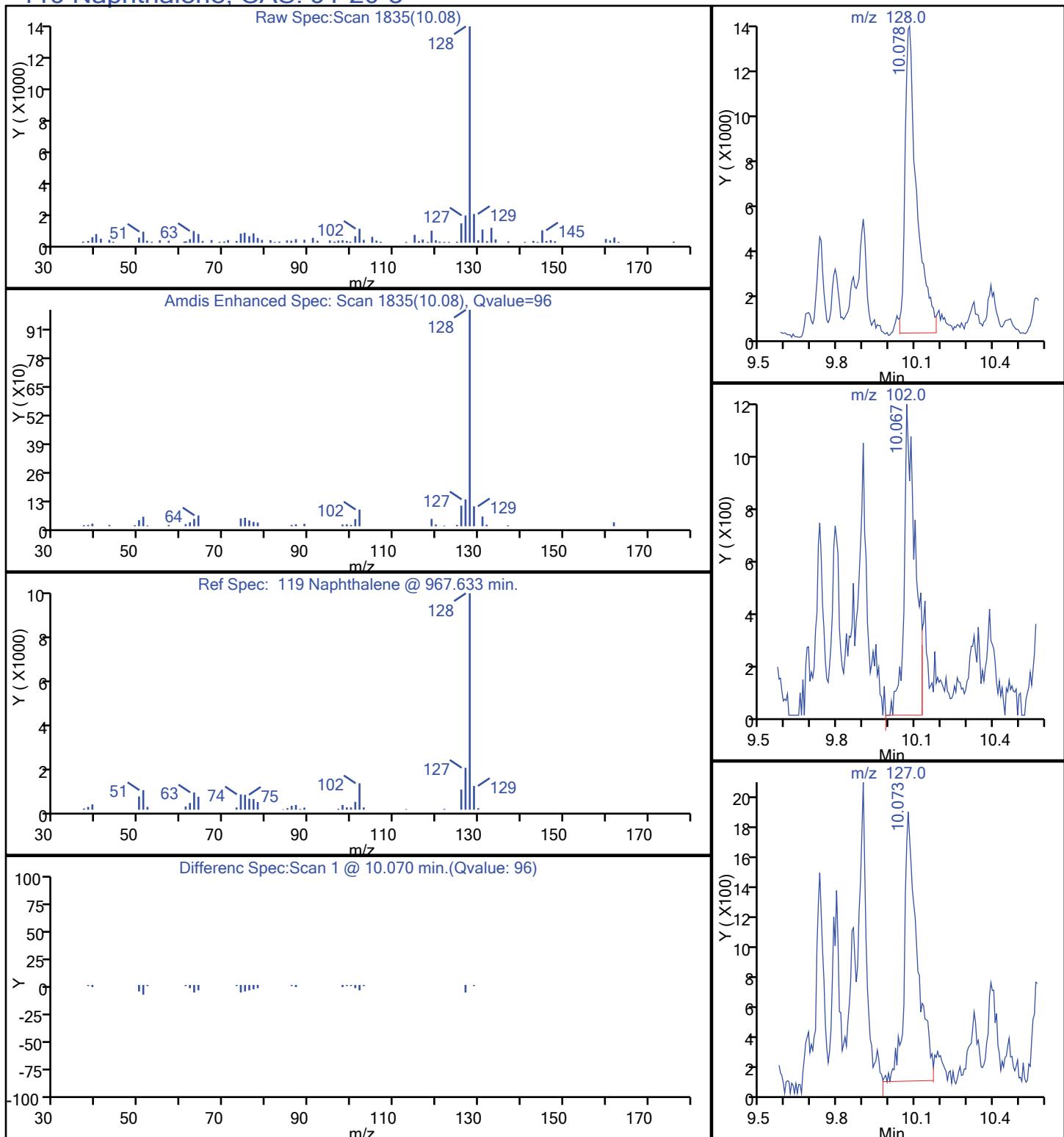
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

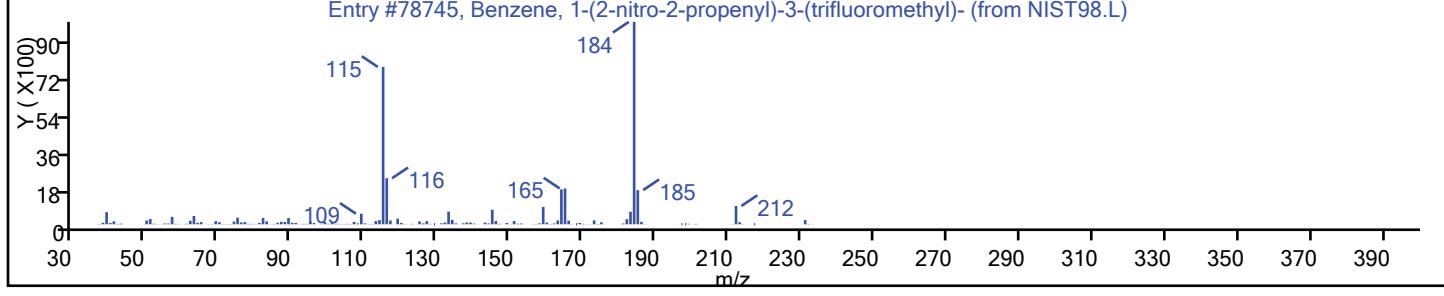
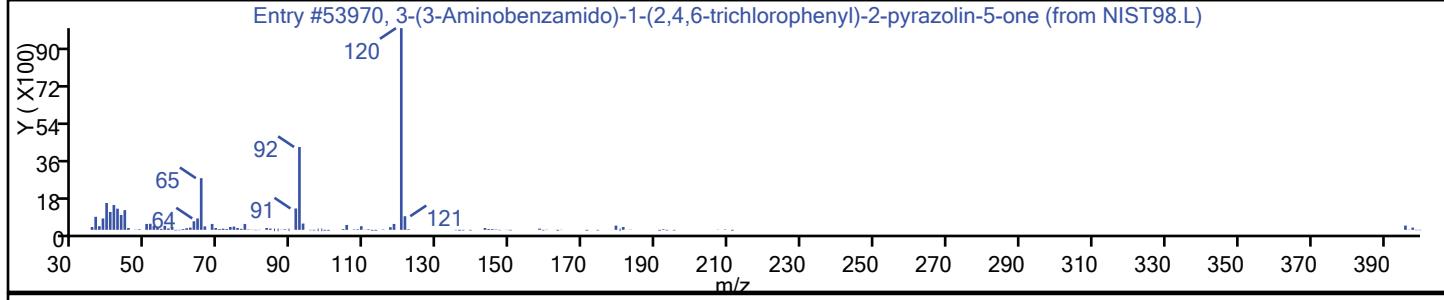
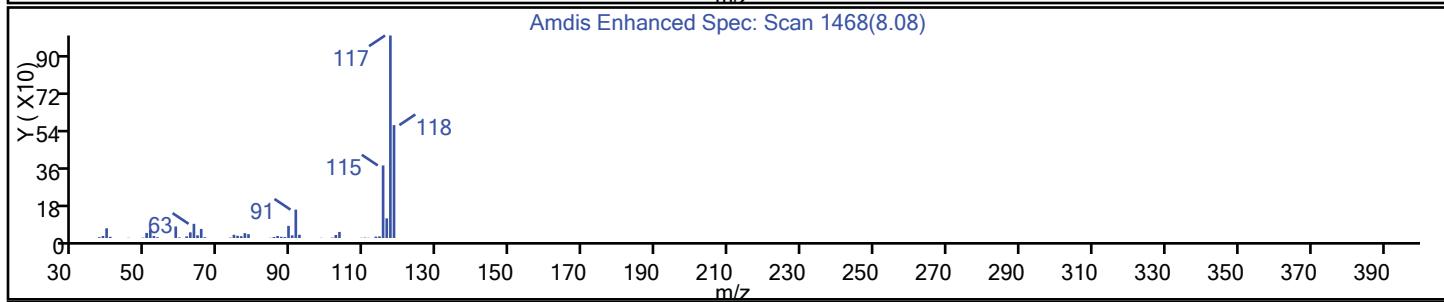
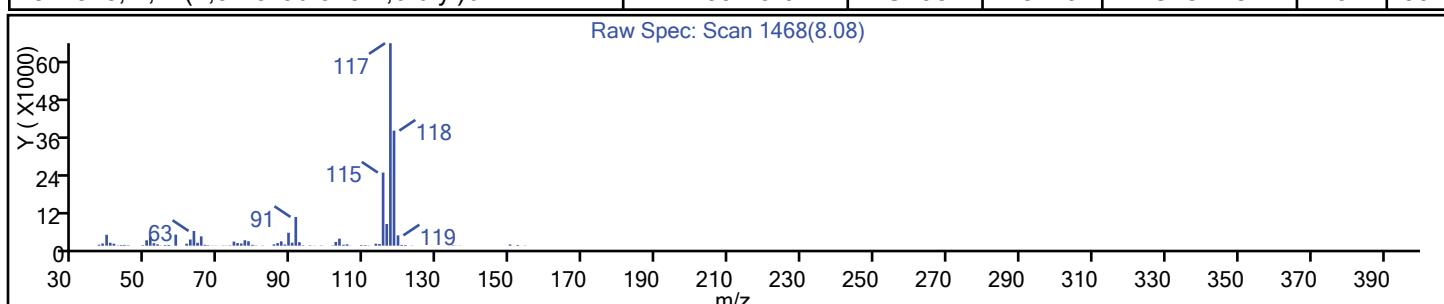
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**119 Naphthalene, CAS: 91-20-3**

## TestAmerica Nashville

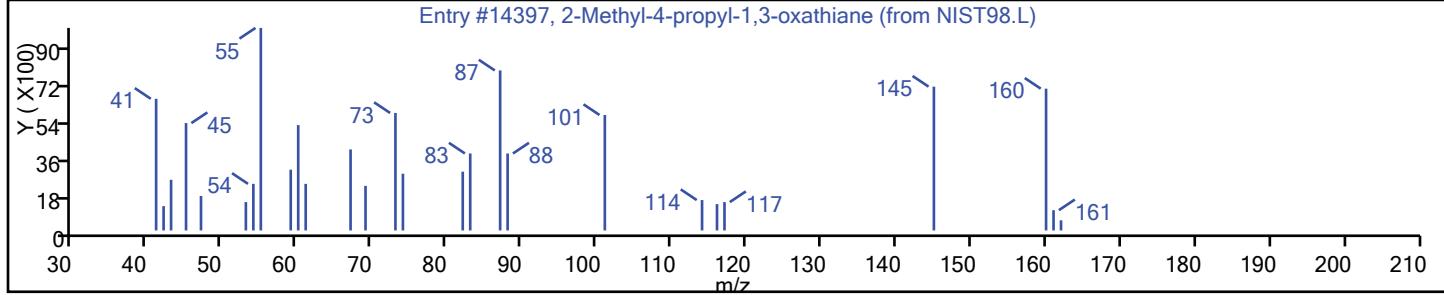
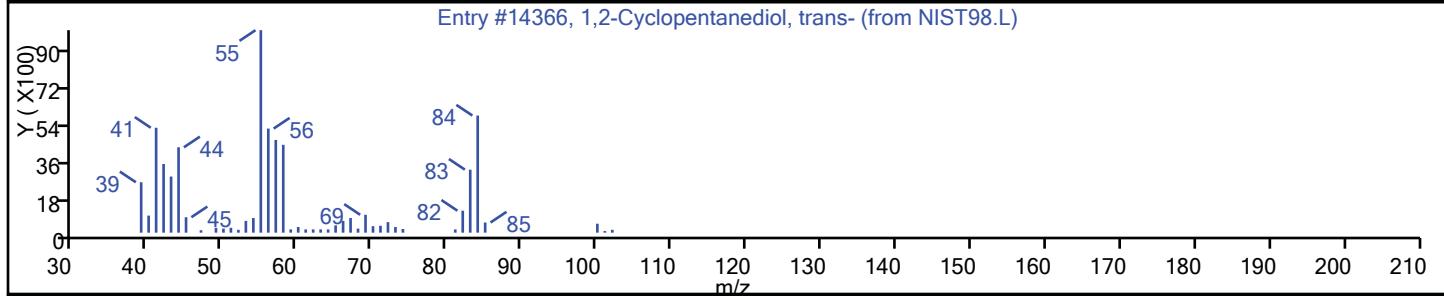
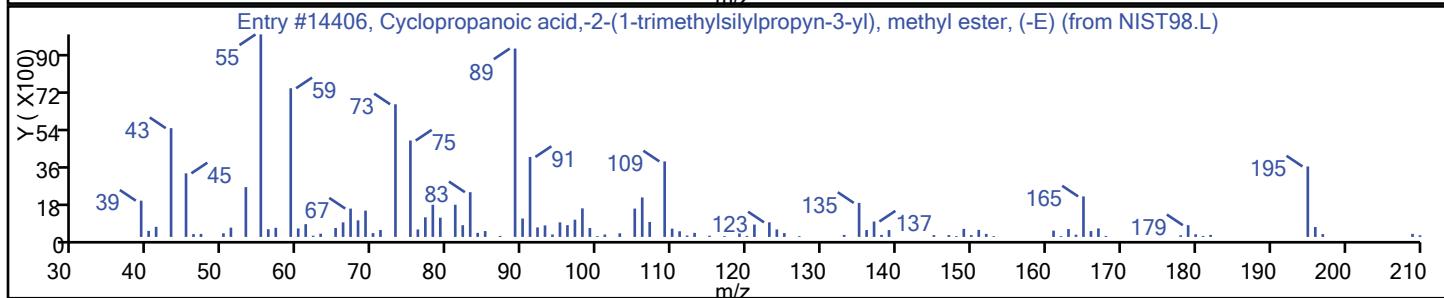
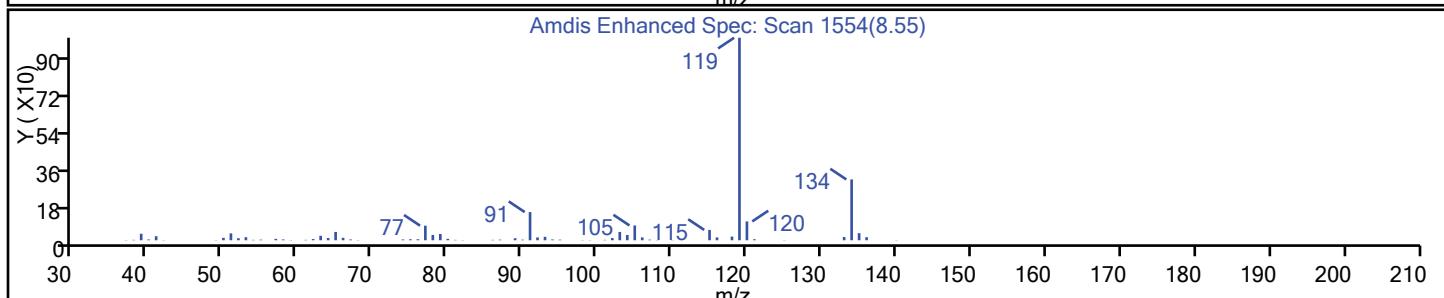
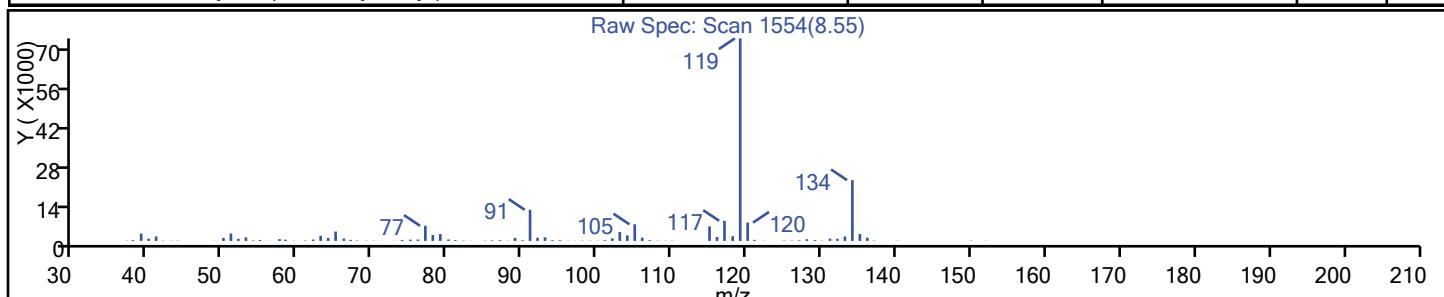
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 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
trans-Cinnamyl bromide	26146-77-0	NIST98	53970	C9H9Br	196	59
Benzene, 1,1'-(1,5-hexadiene-1,6-diy)bi	4439-45-6	NIST98.L	78745	C18H18	234	59



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

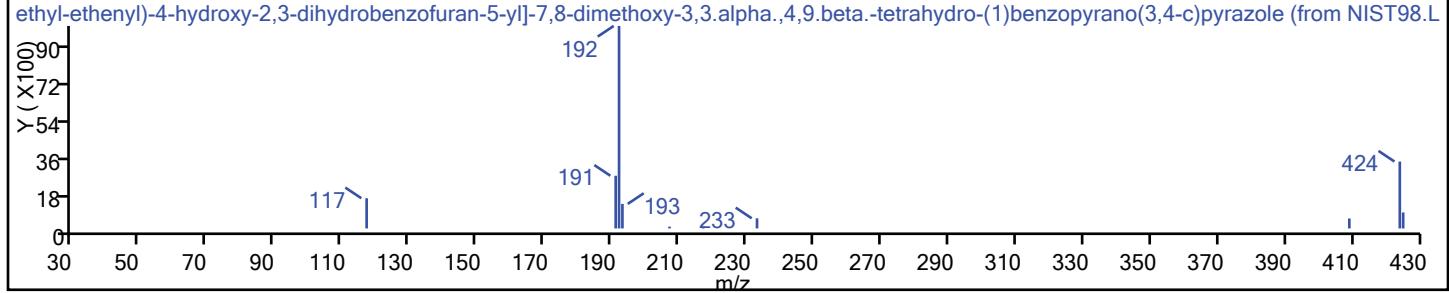
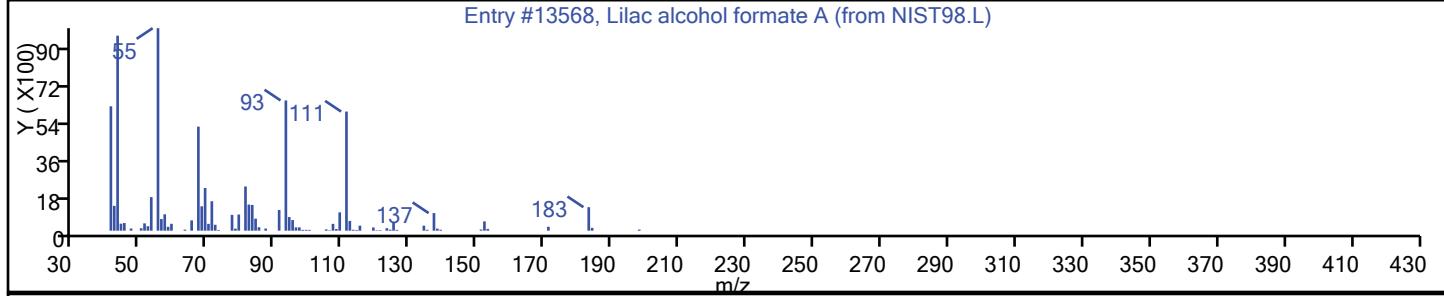
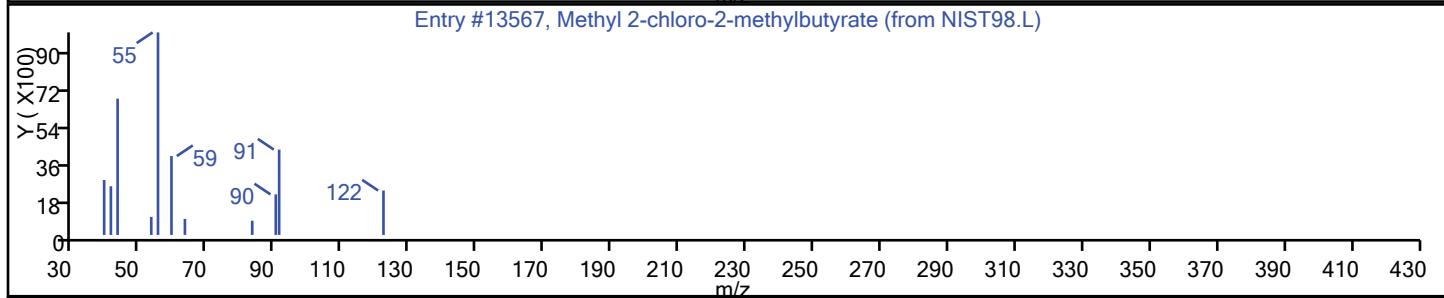
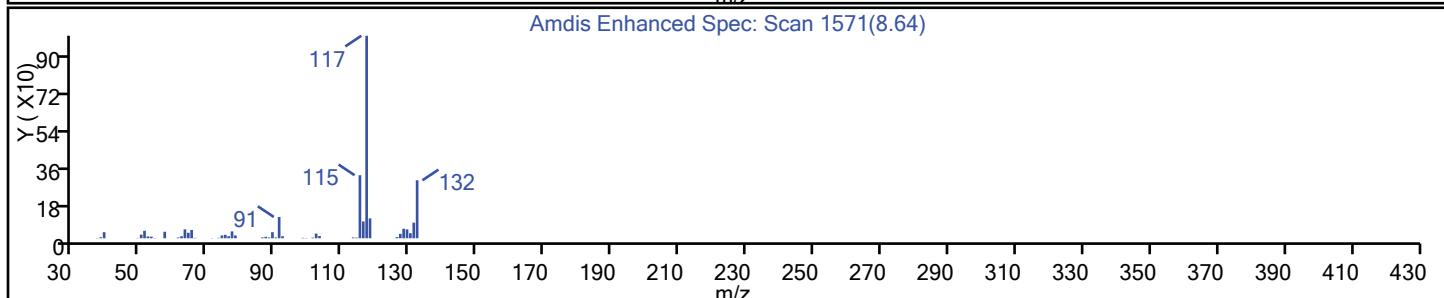
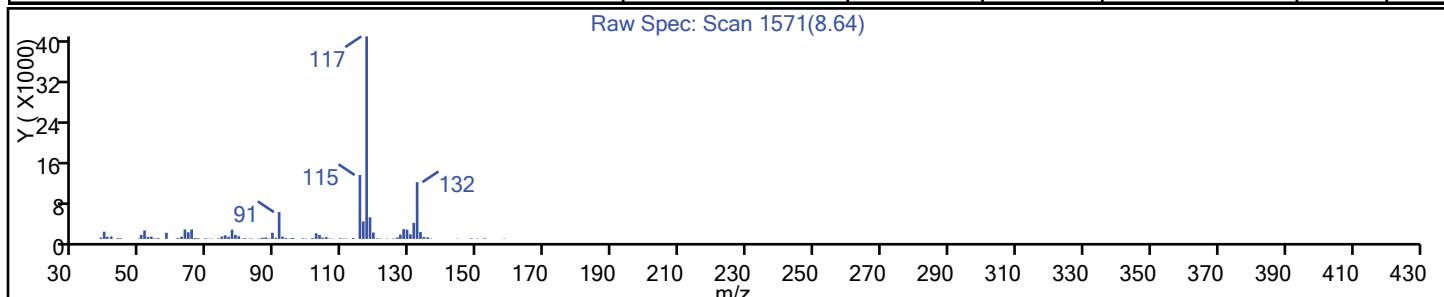
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST98	14406	C10H14	134	95
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98.L	14366	C10H14	134	95
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST98.L	14397	C10H14	134	94



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

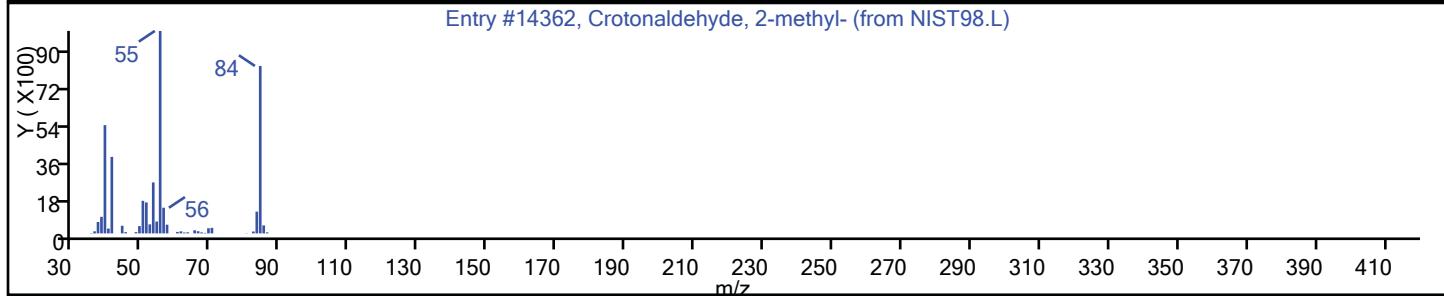
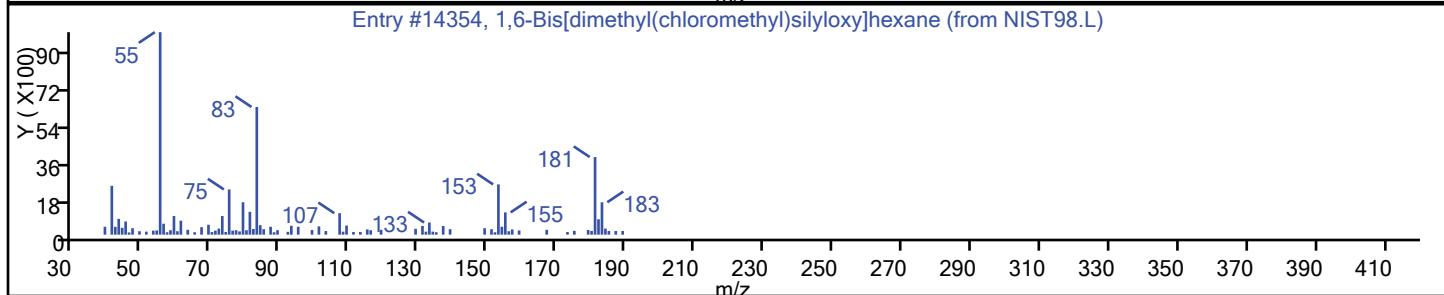
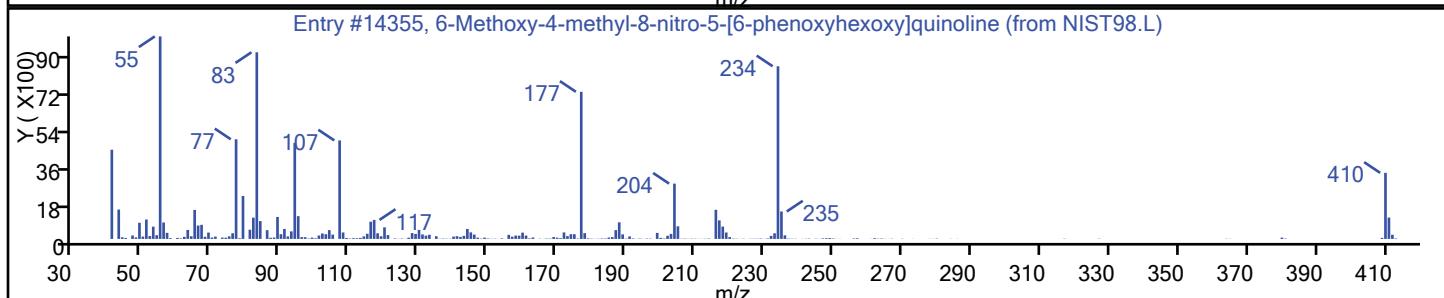
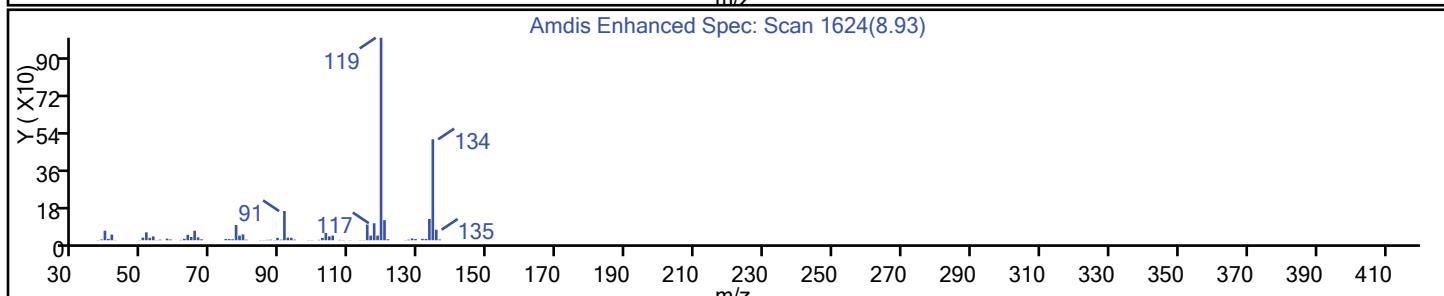
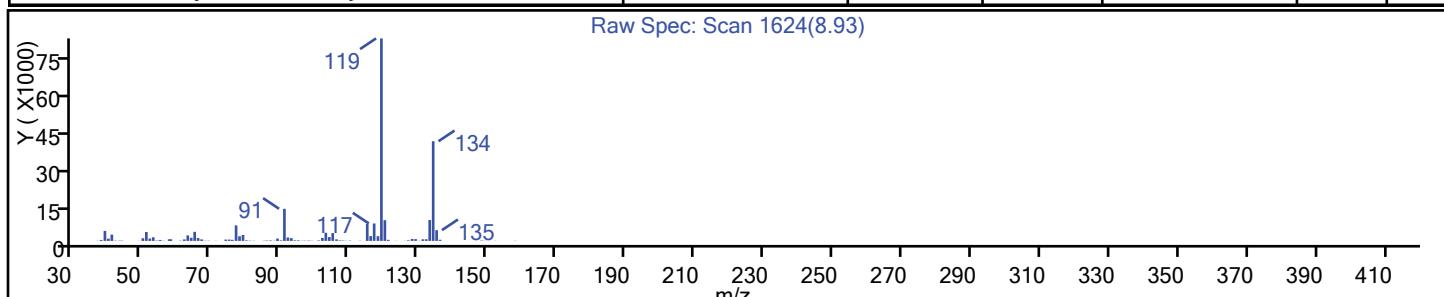
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Indan, 1-methyl-	767-58-8	NIST98	13567	C10H12	132	87
3-Phenylbut-1-ene	934-10-1	NIST98.L	13568	C10H12	132	72
Benzaldehyde, 4-(1-phenyl-2-propenyl)oxy)	1000277-56-1	NIST98.L	81154	C16H14O2	238	53



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98	14355	C10H14	134	97
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98.L	14354	C10H14	134	95
Benzene, 2-ethyl-1,3-dimethyl-	2870-04-4	NIST98.L	14362	C10H14	134	94



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

Operator ID: EML

ALS Bottle#: 45 Worklist Smp#: 18

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

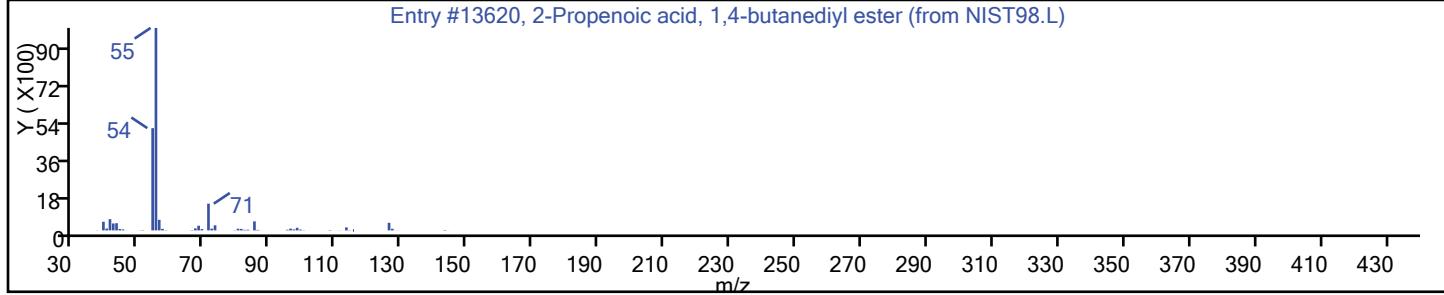
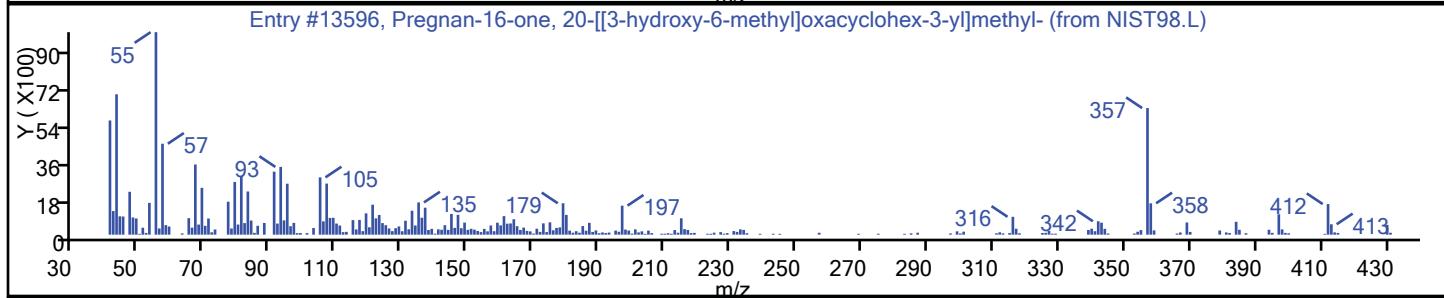
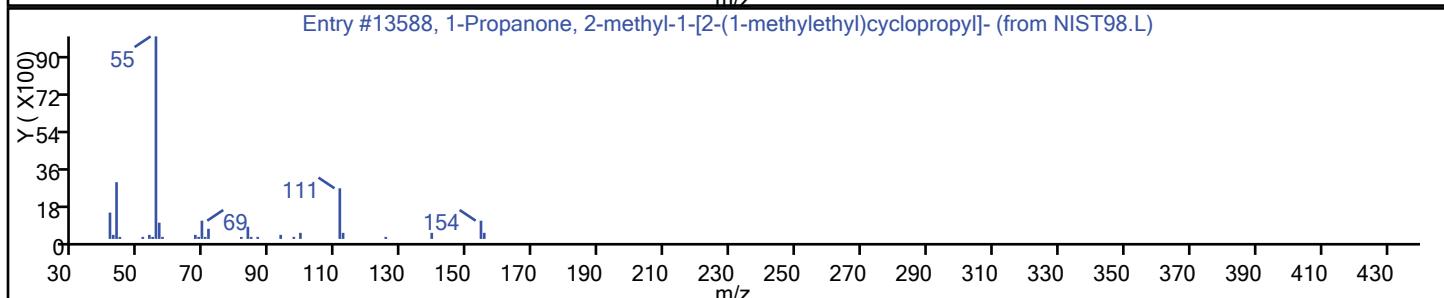
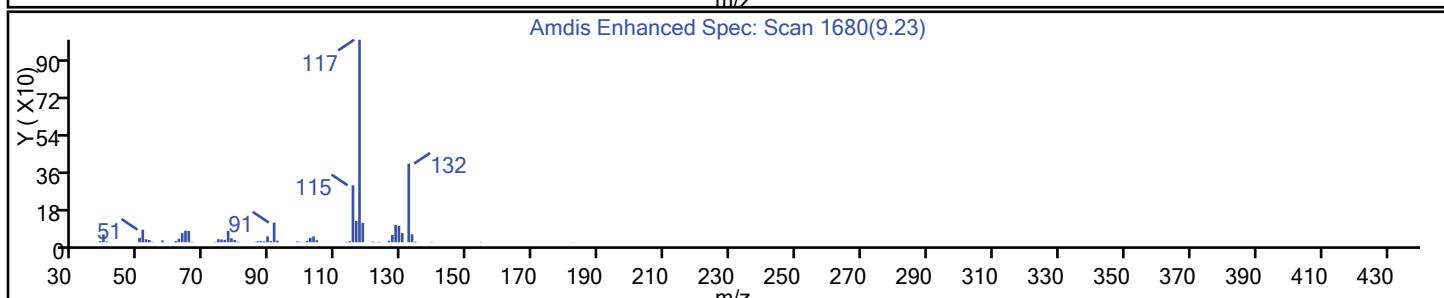
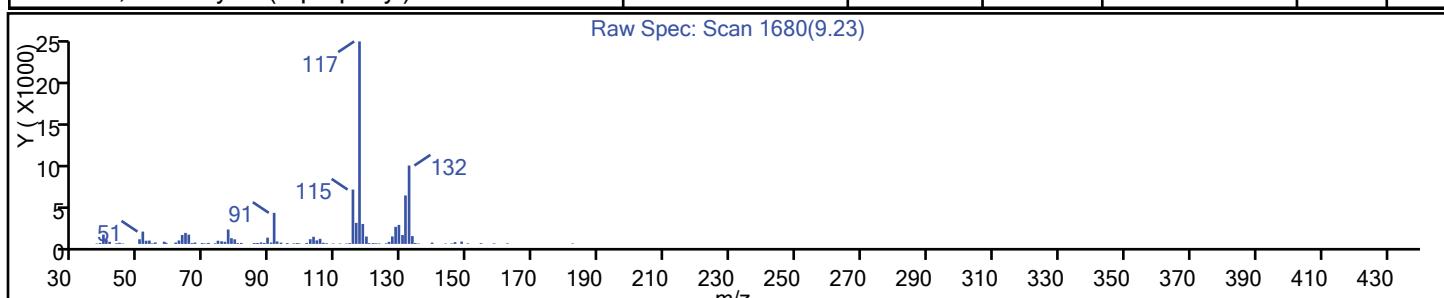
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

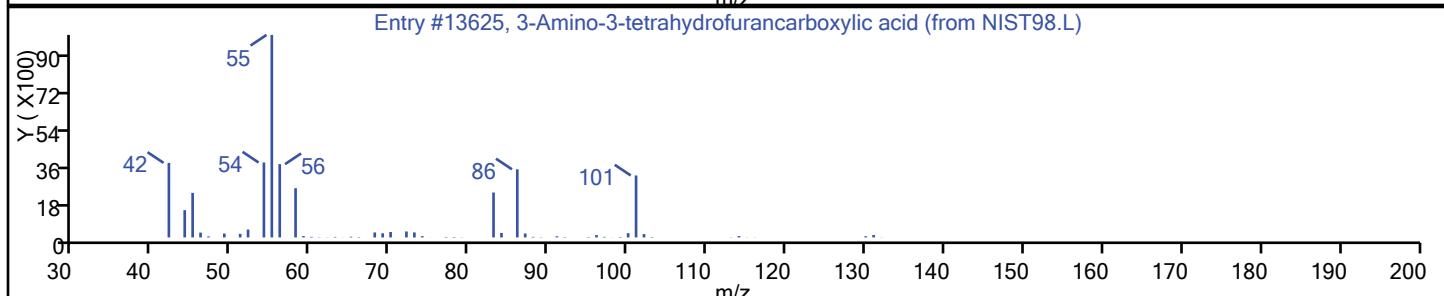
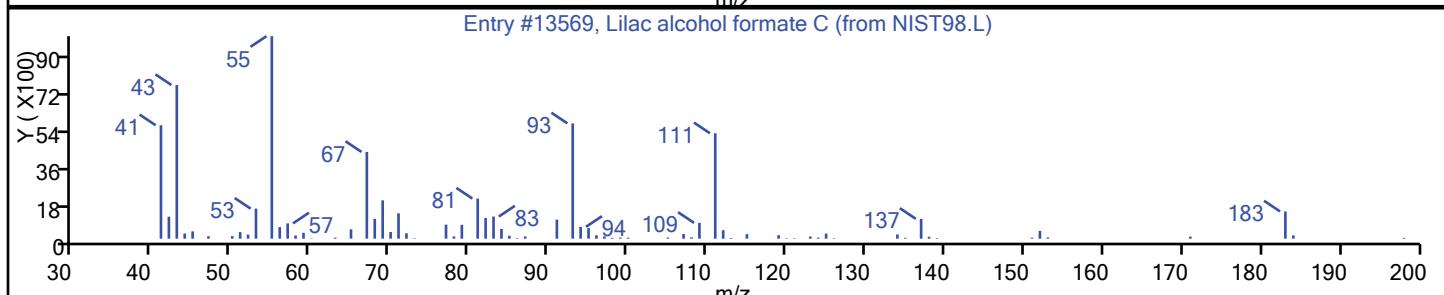
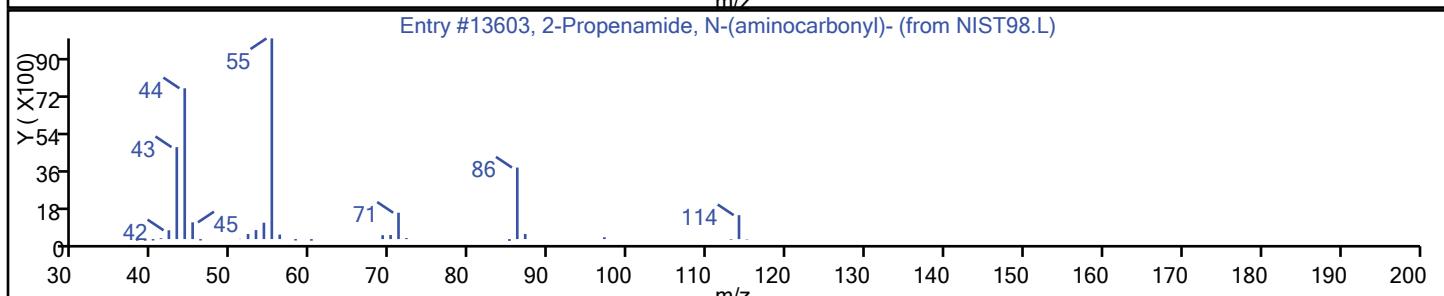
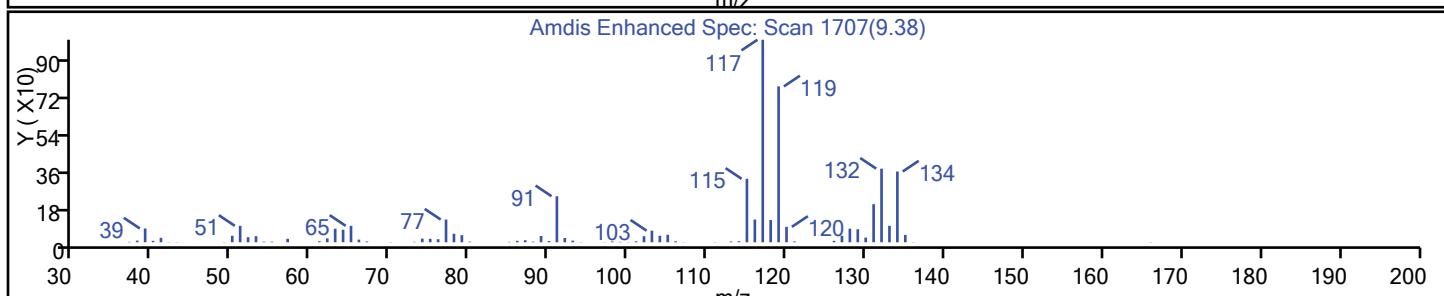
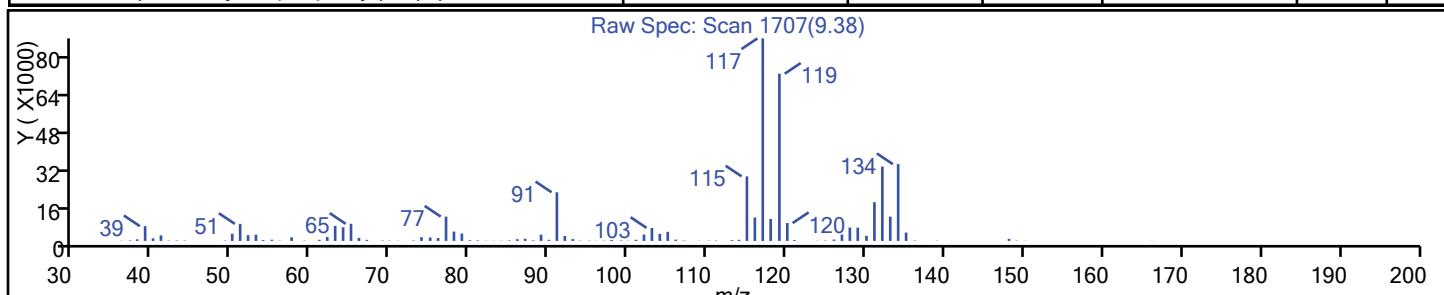
Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
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Benzene, (2-methyl-2-propenyl)-	3290-53-7	NIST98.L	13596	C10H12	132	87
Benzene, 1-methyl-2-(2-propenyl)-	1587-04-8	NIST98.L	13620	C10H12	132	86



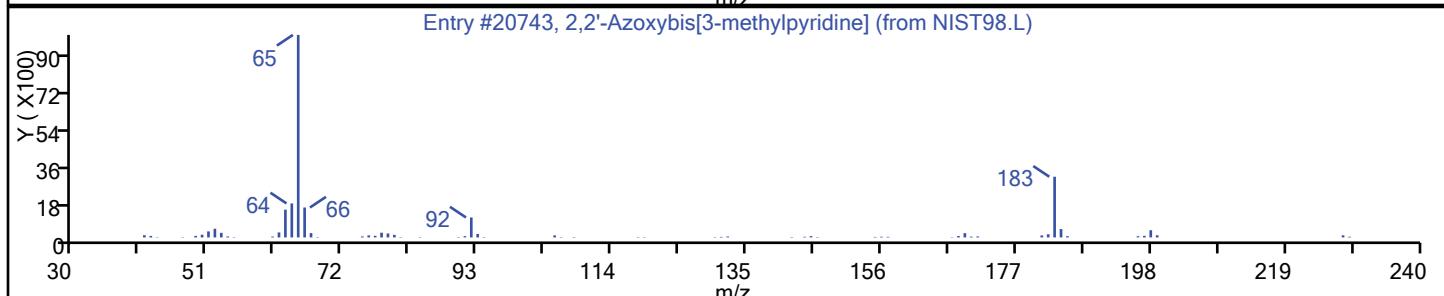
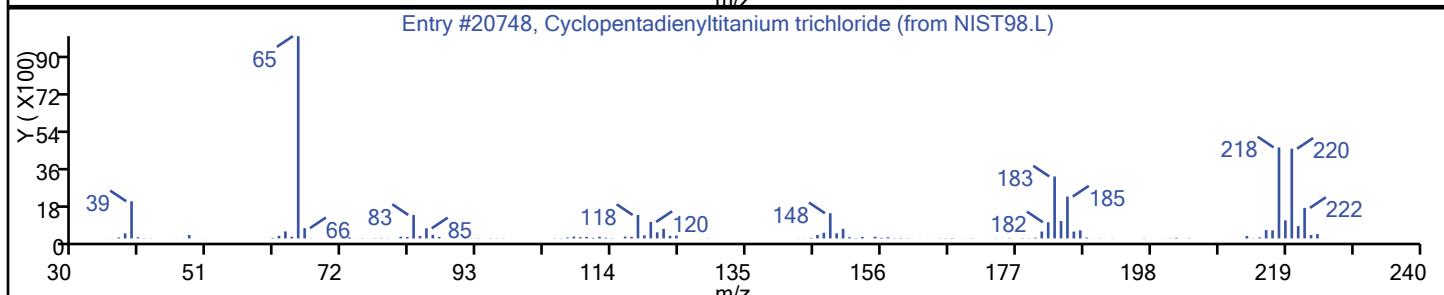
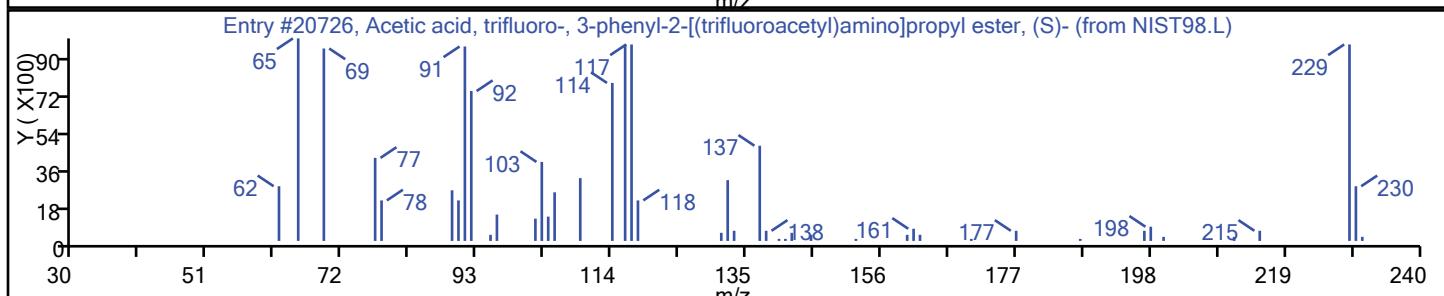
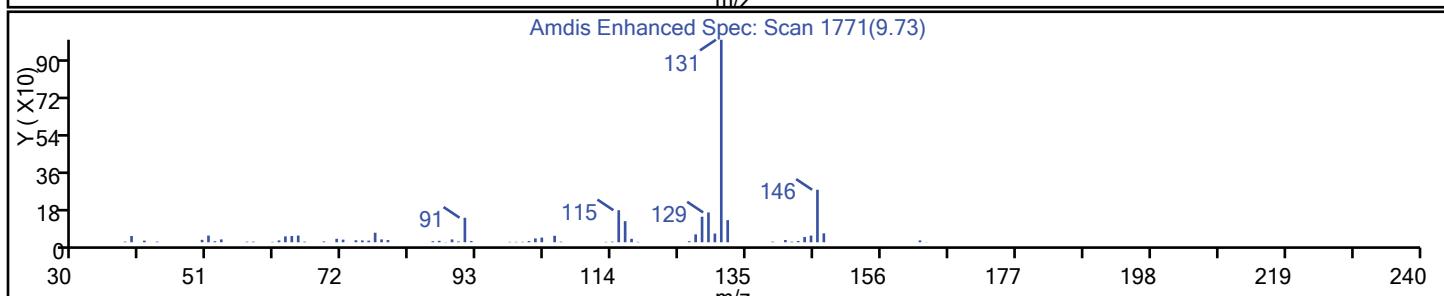
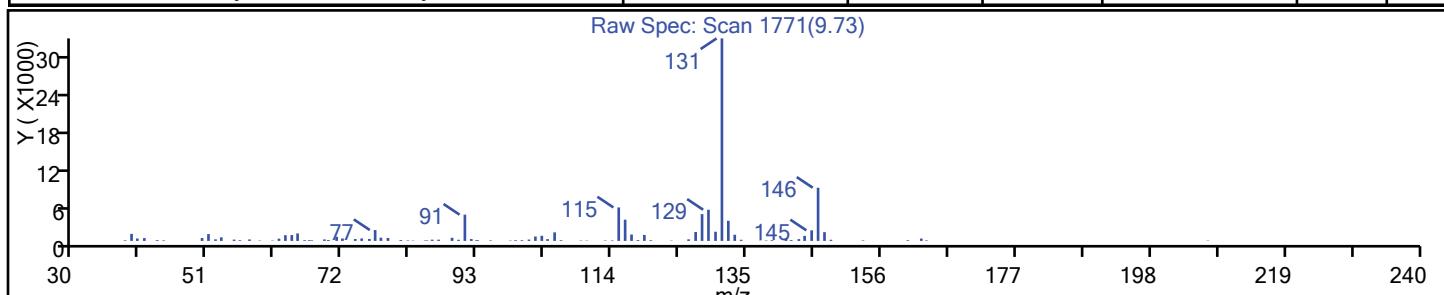
TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2-ethenyl-1,4-dimethyl-	2039-89-6	NIST98	13603	C10H12	132	94
1-Phenyl-1-butene	824-90-8	NIST98.L	13569	C10H12	132	91
Benzene, (1-methyl-1-propenyl)-, (E)-	768-00-3	NIST98.L	13625	C10H12	132	78



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

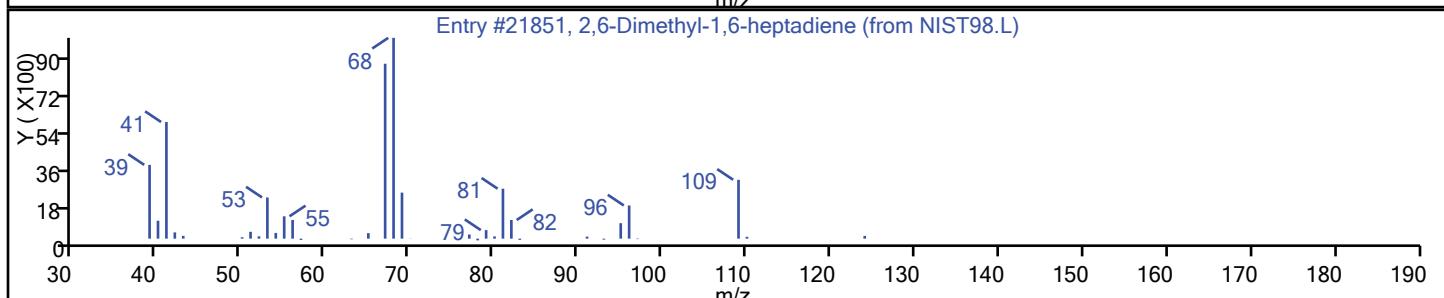
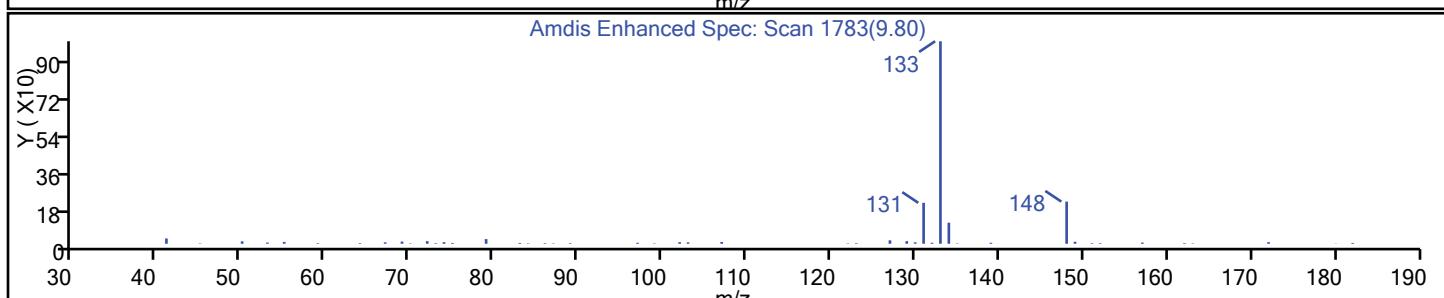
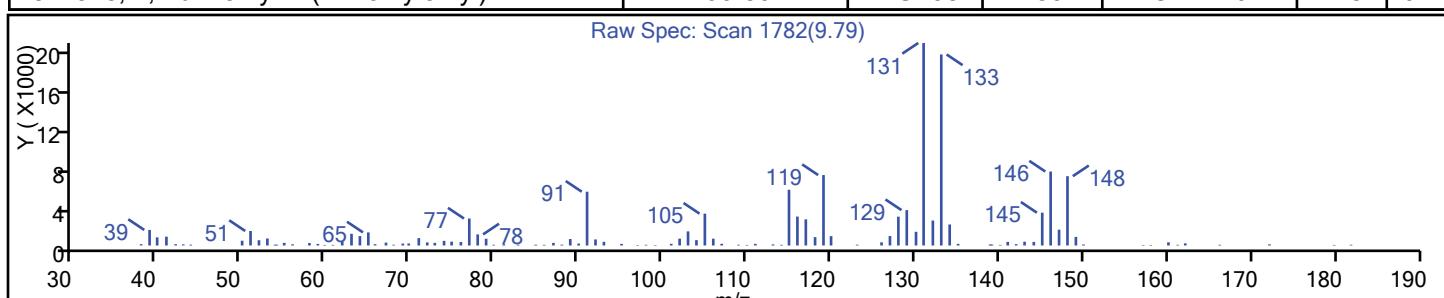
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, (3-methyl-2-butenyl)-	4489-84-3	NIST98	20726	C11H14	146	94
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST98.L	20748	C11H14	146	94
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	NIST98.L	20743	C11H14	146	94



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

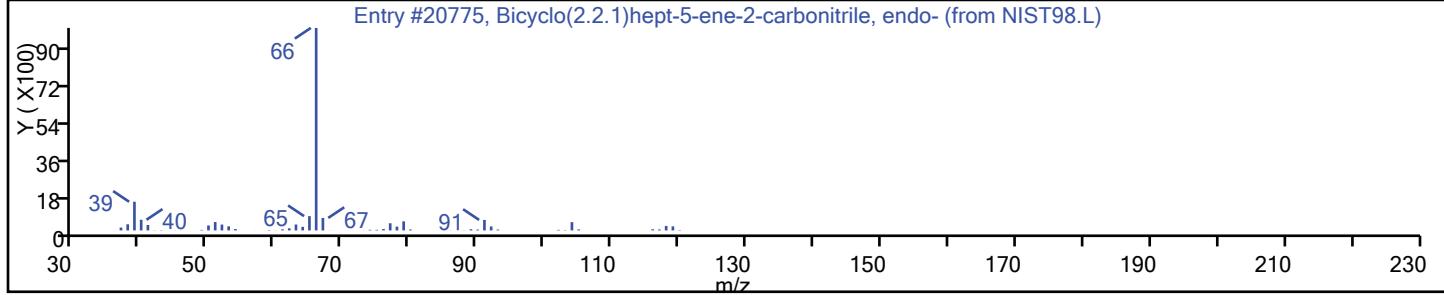
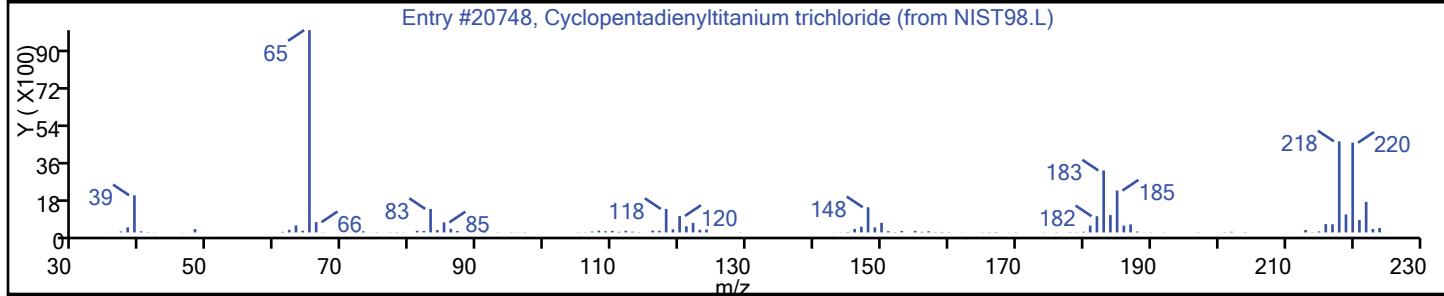
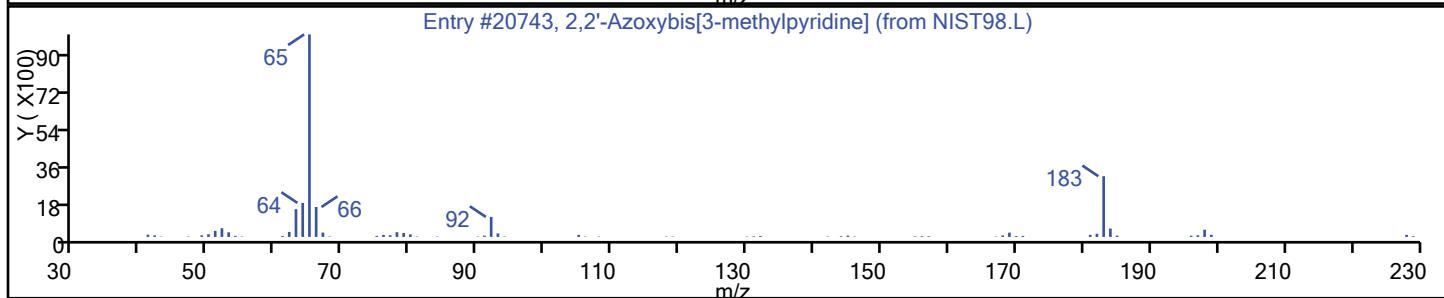
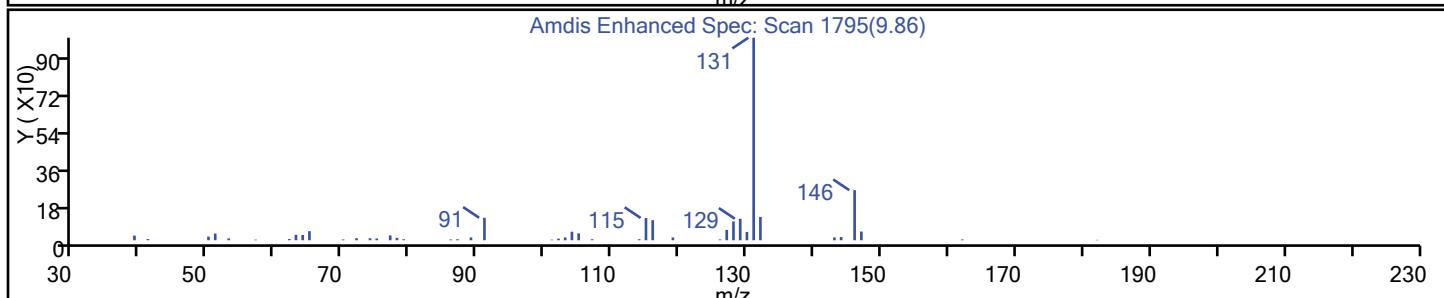
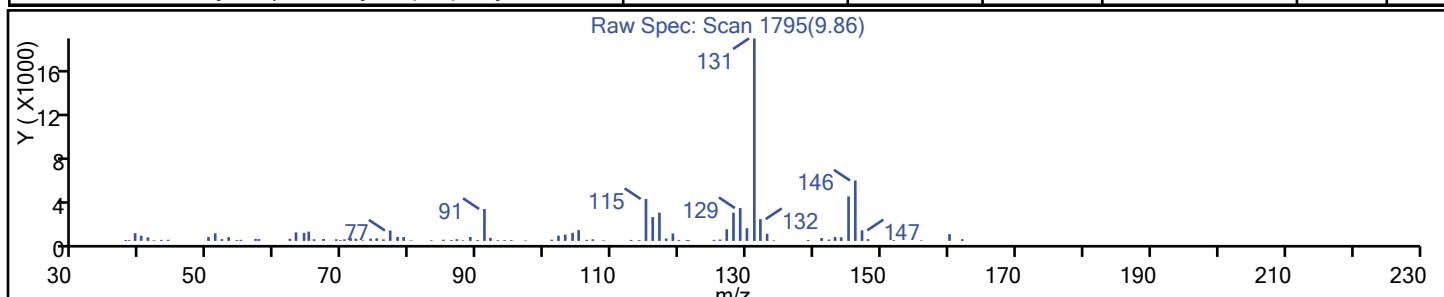
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2,4-dimethyl-1-(1-methylethyl)-	4706-89-2	NIST98	21851	C11H16	148	64



## TestAmerica Nashville

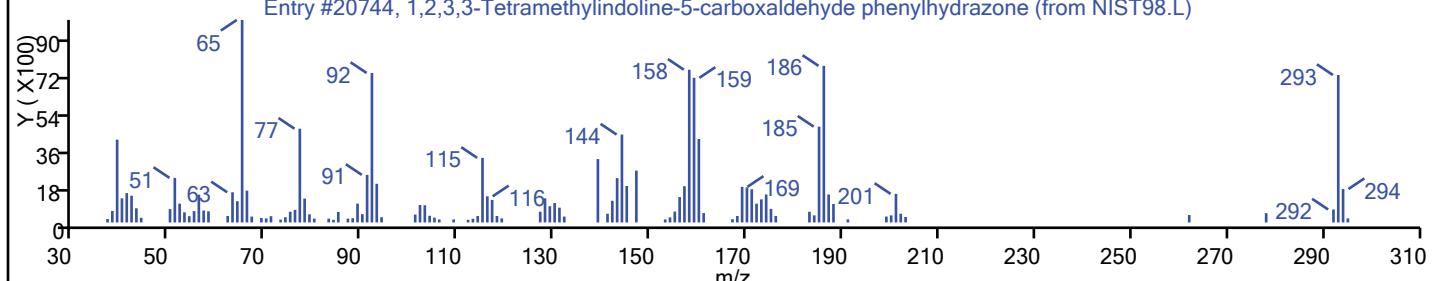
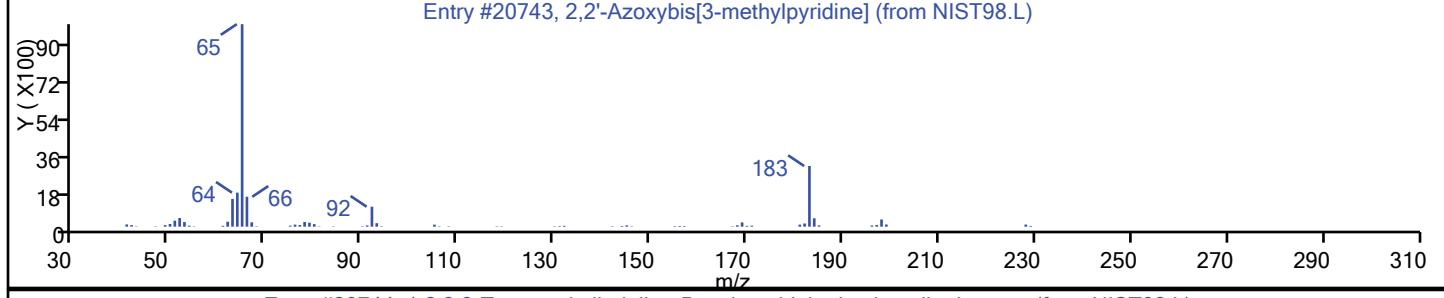
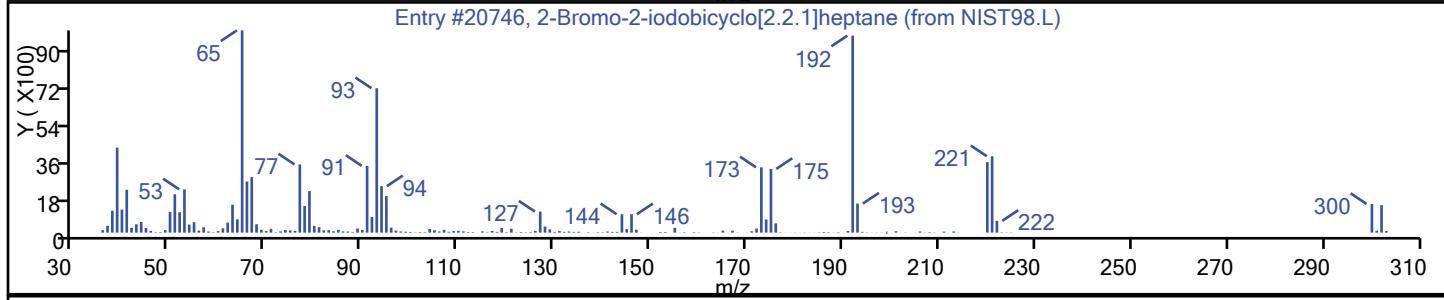
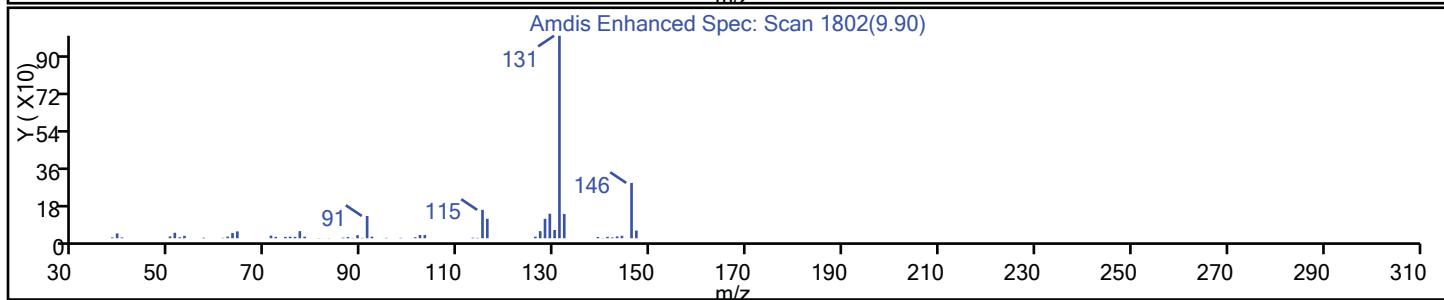
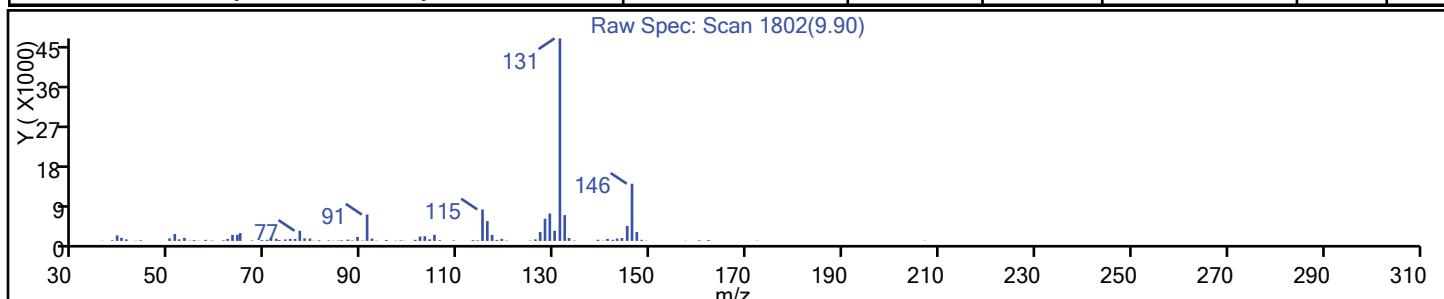
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 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	NIST98	20743	C11H14	146	94
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST98.L	20748	C11H14	146	91
Benzene, 1-methyl-4-(1-methyl-2-propenyl	97664-18-1	NIST98.L	20775	C11H14	146	91



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

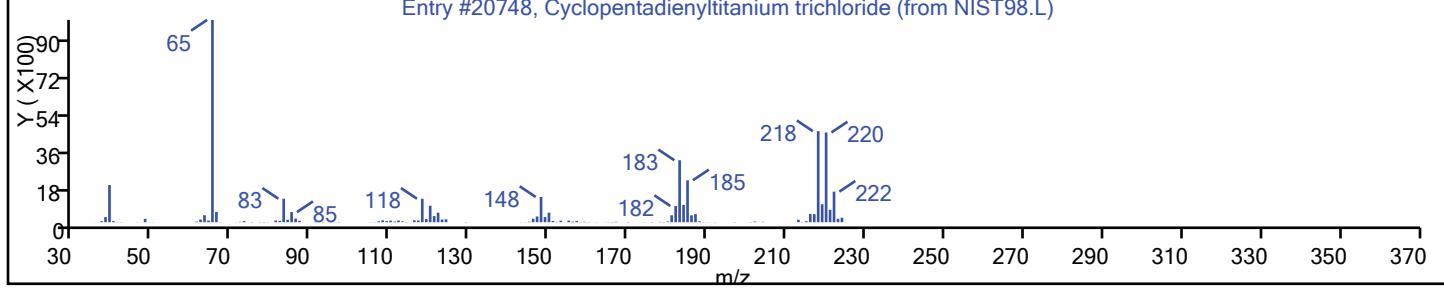
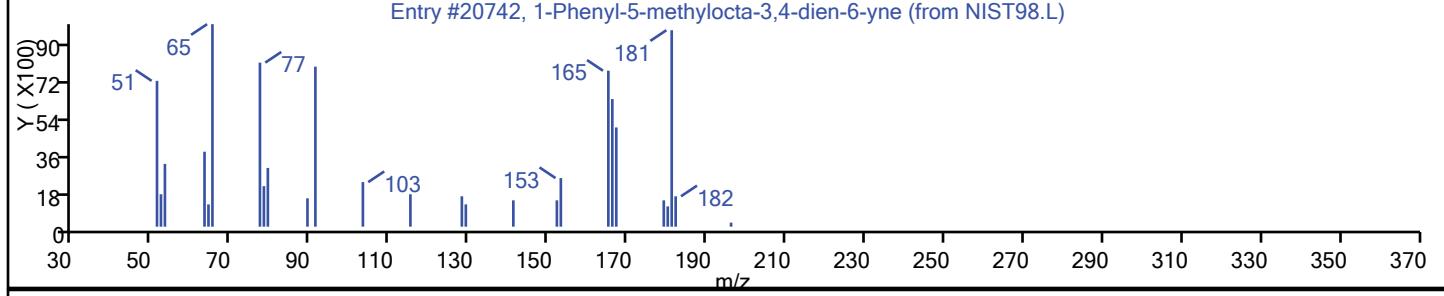
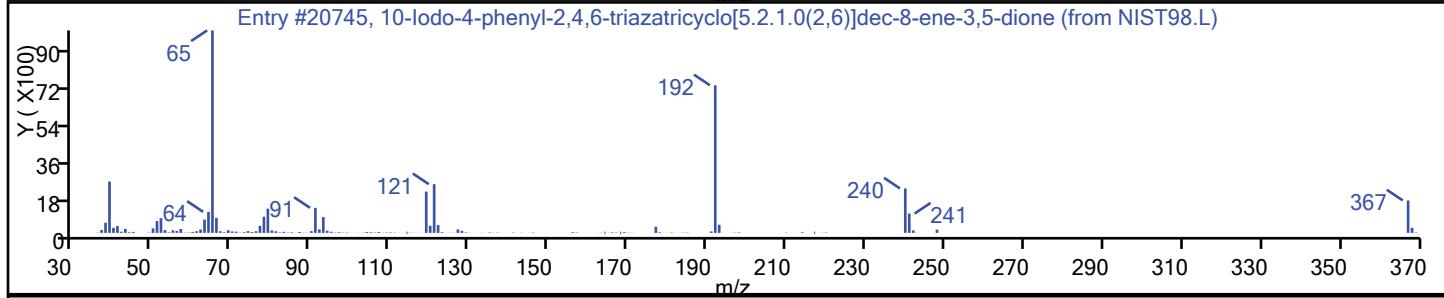
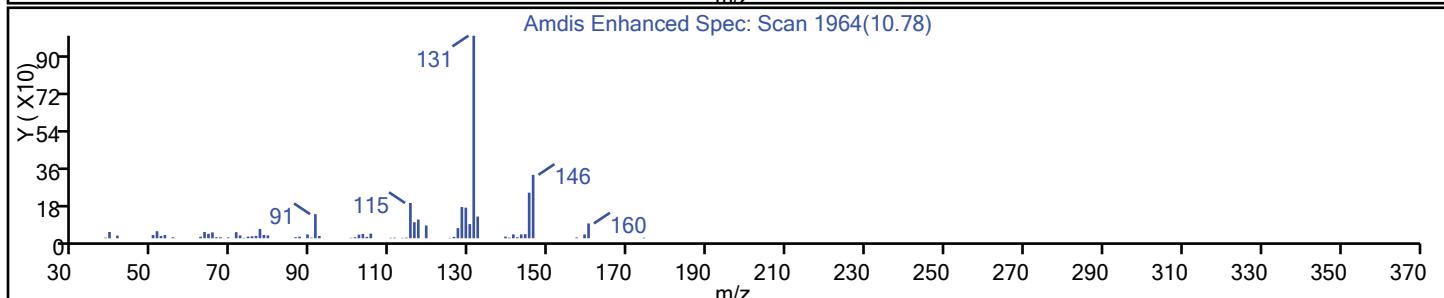
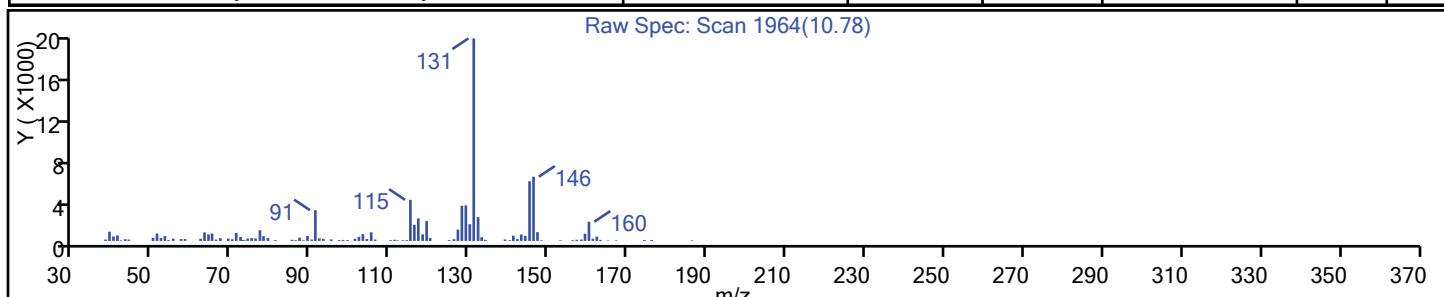
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST98	20746	C11H14	146	95
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	NIST98.L	20743	C11H14	146	94
1H-Indene, 2,3-dihydro-5,6-dimethyl-	1075-22-5	NIST98.L	20744	C11H14	146	93



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D  
 Injection Date: 06-Jun-2015 07:30:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-5 Lab Sample ID: 490-79645-5  
 Client ID: OB-27-060115  
 Operator ID: EML ALS Bottle#: 45 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1H-Indene, 2,3-dihydro-4,6-dimethyl-	1685-82-1	NIST98	20745	C11H14	146	91
1H-Indene, 2,3-dihydro-1,3-dimethyl-	4175-53-5	NIST98.L	20742	C11H14	146	87
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST98.L	20748	C11H14	146	87



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

Operator ID: EML

ALS Bottle#: 45 Worklist Smp#: 18

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

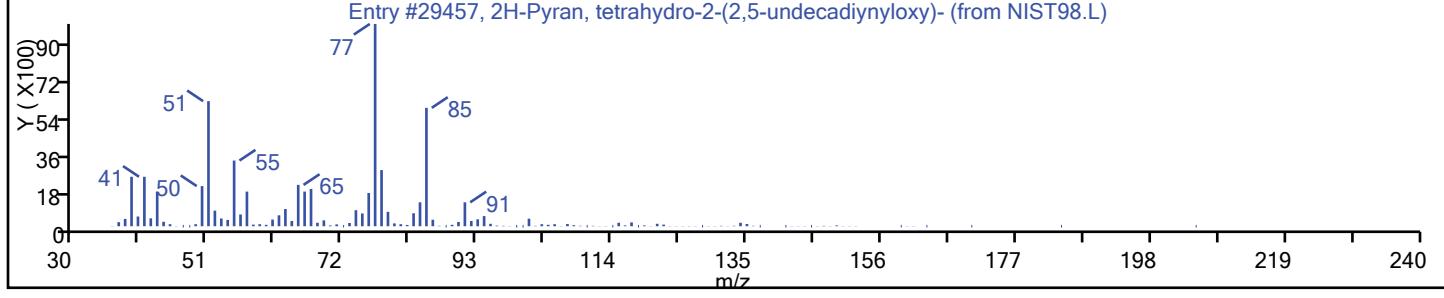
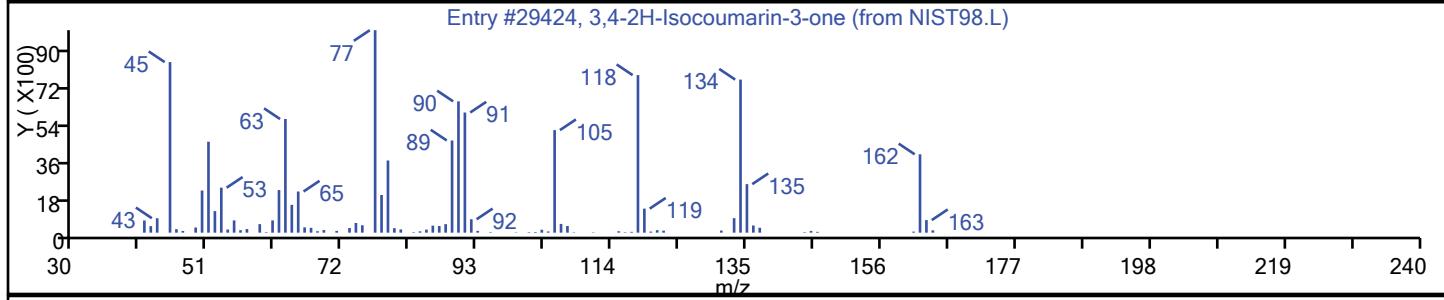
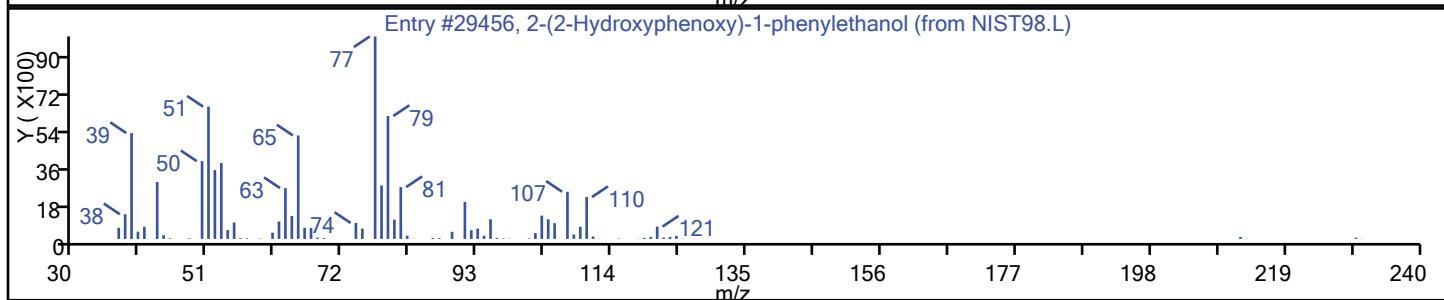
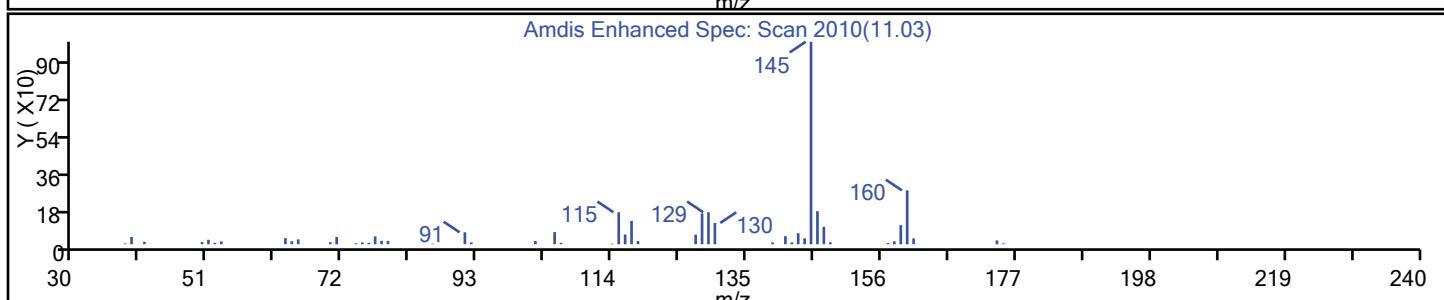
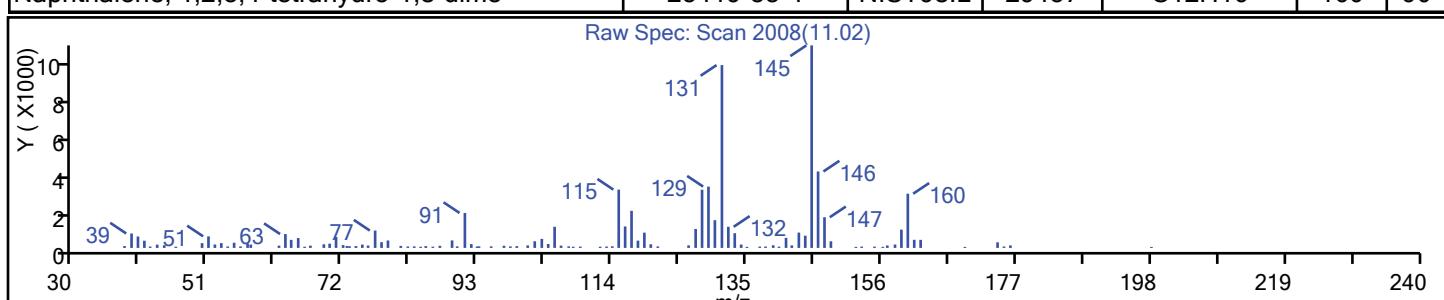
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
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1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	2613-76-5	NIST98.L	29424	C12H16	160	90
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime	25419-33-4	NIST98.L	29457	C12H16	160	90



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-45.D

Injection Date: 06-Jun-2015 07:30:30

Instrument ID: HP32

Lims ID: 490-79645-A-5

Lab Sample ID: 490-79645-5

Client ID: OB-27-060115

Operator ID: EML

ALS Bottle#: 45 Worklist Smp#: 18

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

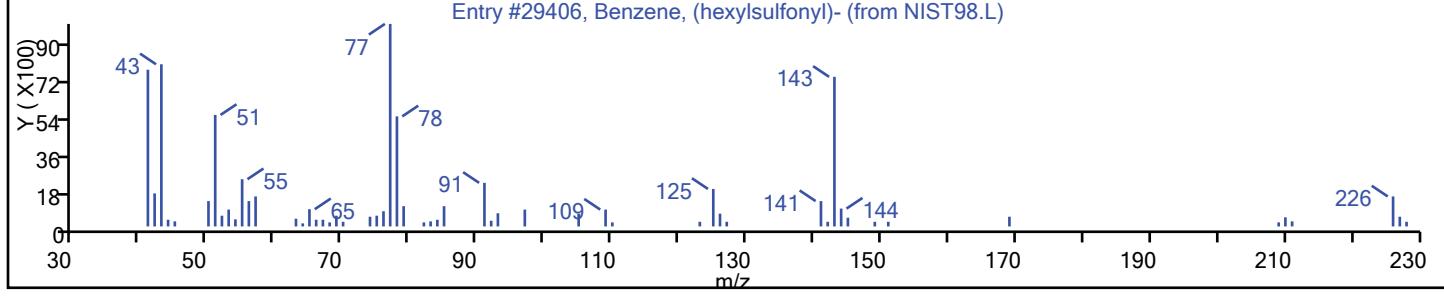
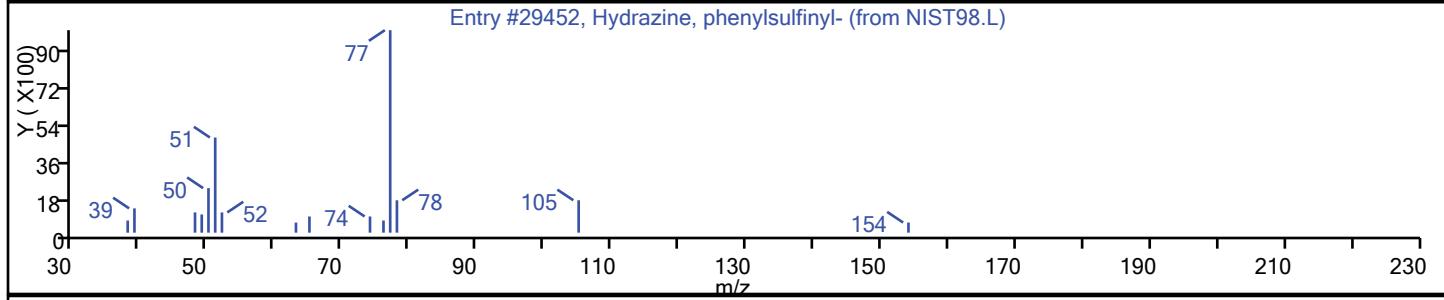
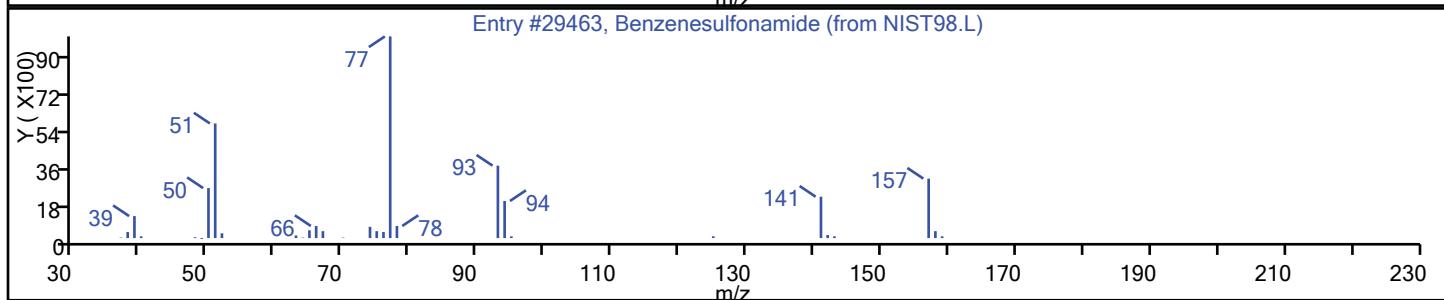
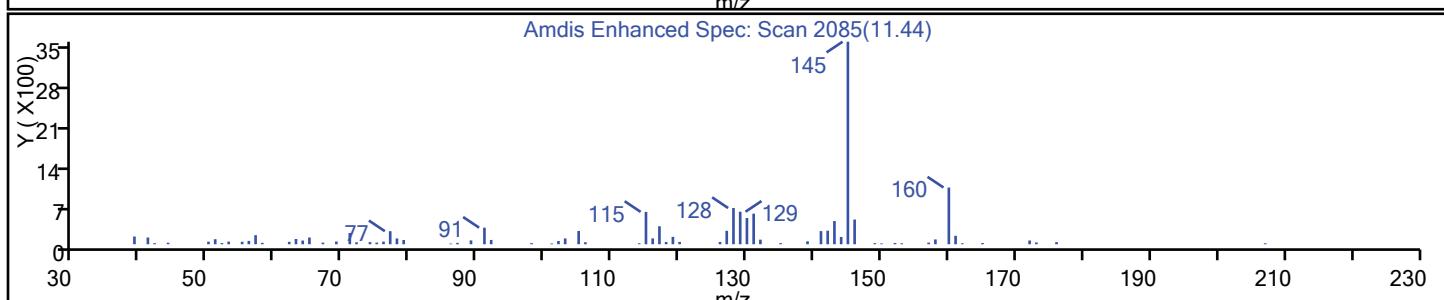
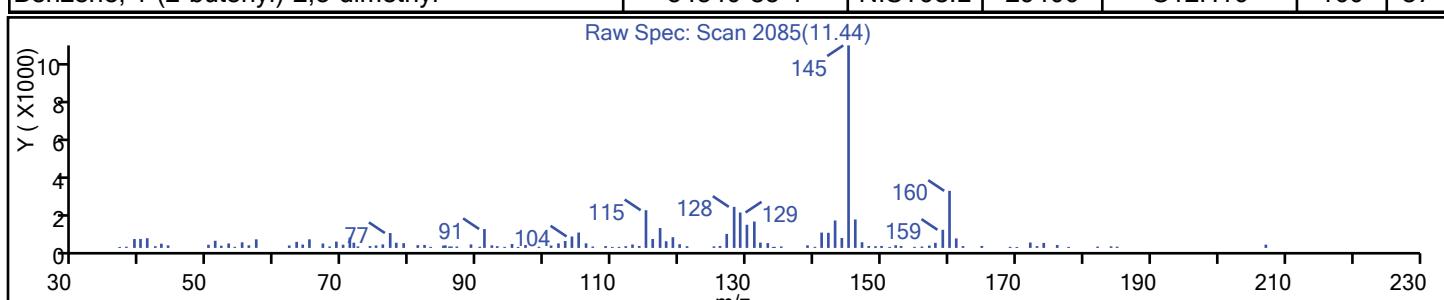
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime	25419-33-4	NIST98	29463	C12H16	160	90
Benzene, 1,3,5-trimethyl-2-(1-methylethe	14679-13-1	NIST98.L	29452	C12H16	160	90
Benzene, 1-(2-butenyl)-2,3-dimethyl-	54340-85-1	NIST98.L	29406	C12H16	160	87



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-11R-060115

Lab Sample ID: 490-79645-6

Matrix: Ground Water

Lab File ID: 060515-46.D

Analysis Method: 8260C

Date Collected: 06/01/2015 14:55

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 07:58

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	2.9		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	22		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.31	J	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	1.9		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	J	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.53	J	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.41	J	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Client Sample ID: OB-11R-060115 Lab Sample ID: 490-79645-6  
Matrix: Ground Water Lab File ID: 060515-46.D  
Analysis Method: 8260C Date Collected: 06/01/2015 14:55  
Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 07:58  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 254074 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	114		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: OB-11R-060115 Lab Sample ID: 490-79645-6  
 Matrix: Ground Water Lab File ID: 060515-46.D  
 Analysis Method: 8260C Date Collected: 06/01/2015 14:55  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 07:58  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 254074 Units: ug/L  
 Number TICs Found: 10 TIC Result Total: 34.61

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		6.4	J
110-54-3	Hexane	2.34	0.21	J
96-37-7	Cyclopentane, methyl-	2.69	3.9	J N
26146-77-0	trans-Cinnamyl bromide	8.09	3.5	J N
767-58-8	Indan, 1-methyl-	8.64	3.0	J N
527-53-7	Benzene, 1,2,3,5-tetramethyl-	8.93	3.4	J N
1560-06-1	Benzene, 2-butenyl-	9.39	5.2	J N
4489-84-3	Benzene, (3-methyl-2-butenyl)-	9.80	2.6	J N
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl-	9.90	3.9	J N
6682-06-0	1H-Indene, 2,3-dihydro-4,5,7-trimethyl-	11.02	2.5	J N

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-46.D  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:58:30 ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-6  
 Misc. Info.: 490-0056110-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:07:22 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:07:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.446	0.001	99	426476	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	315739	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	93	160831	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.027	0.001	94	99319	24.2	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.239	0.002	0	88481	24.5	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.551	0.001	92	409845	26.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.750	0.002	96	135791	28.6	
12 Vinyl chloride	62	1.216	1.216	0.000	88	553	0.1152	
15 Chloroethane	64	1.428	1.428	0.000	99	66269	21.5	
37 1,1-Dichloroethane	63	2.424	2.424	0.000	93	1952	0.2440	
42 cis-1,2-Dichloroethene	61	2.751	2.745	0.006	74	2168	0.3058	
53 Cyclohexane	56	3.077	3.077	0.000	87	14917	1.91	
57 Benzene	78	3.279	3.273	0.006	94	55289	2.85	
65 Methylcyclohexane	83	3.812	3.818	-0.006	85	3611	0.4131	
76 Toluene	91	4.612	4.601	0.011	99	3459	0.1612	
90 m-Xylene & p-Xylene	91	5.957	5.935	0.022	0	2009	0.1196	
94 Isopropylbenzene	105	6.621	6.610	0.011	95	11181	0.5345	
S 134 Xylenes, Total	1				0		0.1196	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-46.D  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 07:58:30 ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-6  
 Misc. Info.: 490-0056110-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 10:07:22 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:07:22

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Ethyl bromide	1.978	247		
Hexane	2.337	1295	0.2085	
Tetrahydrofuran	2.936	409	0.7227	
BFB	6.752	135791		
sec-Butylbenzene	7.672	3089	0.1545	

## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
2.685	133874	3.92	1	94	1471	C6H12	84	96-37-7 Cyclopentane, methyl-
8.091	126406	3.49	3	64	53970	C9H9Br	196	26146-77-0 trans-Cinnamyl bromide
8.641	108478	3.00	3	87	13567	C10H12	132	767-58-8 Indan, 1-methyl-
8.934	121661	3.36	3	94	14354	C10H14	134	527-53-7 Benzene, 1,2,3,5-tetramethyl-
9.386	187235	5.18	3	91	13578	C10H12	132	1560-06-1 Benzene, 2-butenyl-
9.795	94699	2.62	3	70	20726	C11H14	146	4489-84-3 Benzene, (3-methyl-2-but enyl)-
9.898	140665	3.89	3	94	20746	C11H14	146	6682-71-9 1H-Indene, 2,3-dihydro-4,7-dimethyl-

Report Date: 10-Jun-2015 10:07:23

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
----	----------	-------------	------------	------	-----------	-------------------	-------------	-------

6682-06-0 1H-Indene, 2,3-dihydro-4,5,7-trimethyl-  
 11.019 92197 2.55 3 70 29421 C12H16 160

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
----------	----	----------	-------------

\* 1 Fluorobenzene (IS) 3.447 853054 25.0  
 \* 3 1,4-Dichlorobenzene-d4 7.824 904342 25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

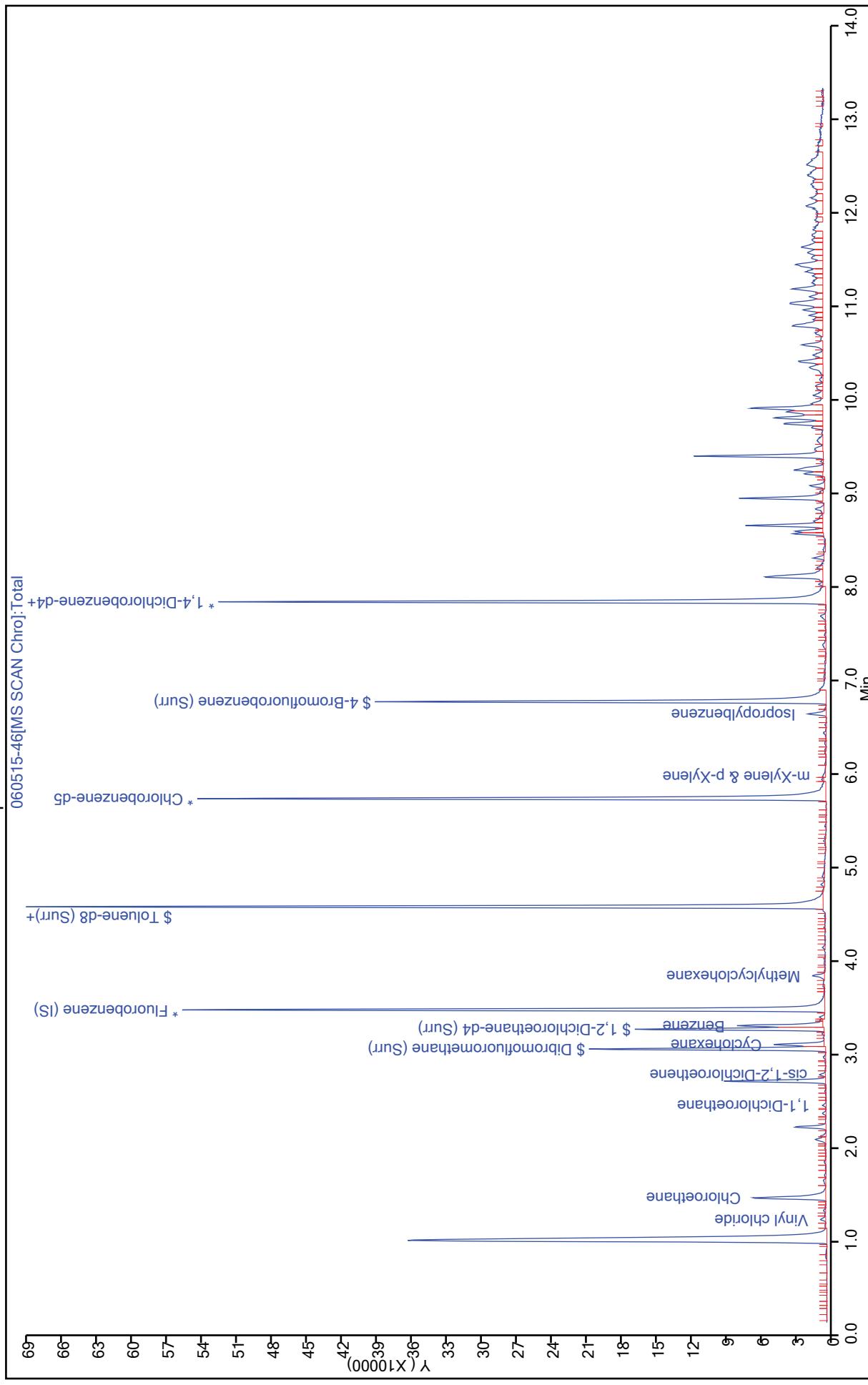
Run Reagent

Report Date: 10-Jun-2015 10:07:23

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
Injection Date: 06-Jun-2015 07:58:30  
Lims ID: 490-79645-A-6  
Client ID: OB-11R-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

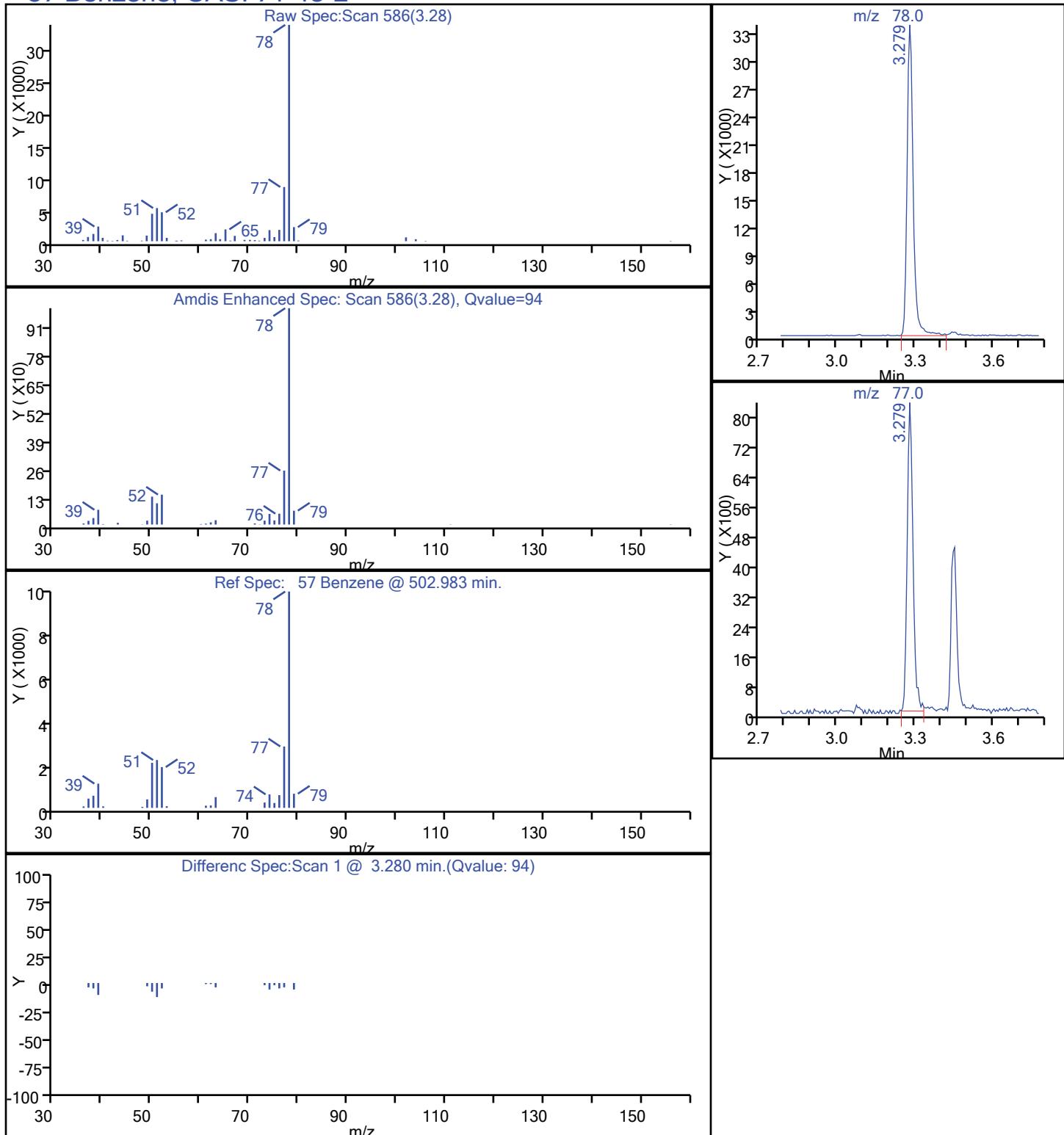
Operator ID: EML  
Worklist Smp#: 19  
Instrument ID: HP32  
Lab Sample ID: 490-79645-6  
Dil. Factor: 1.0000  
ALS Bottle#: 46  
Limit Group: MSV 8260C ICAL



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

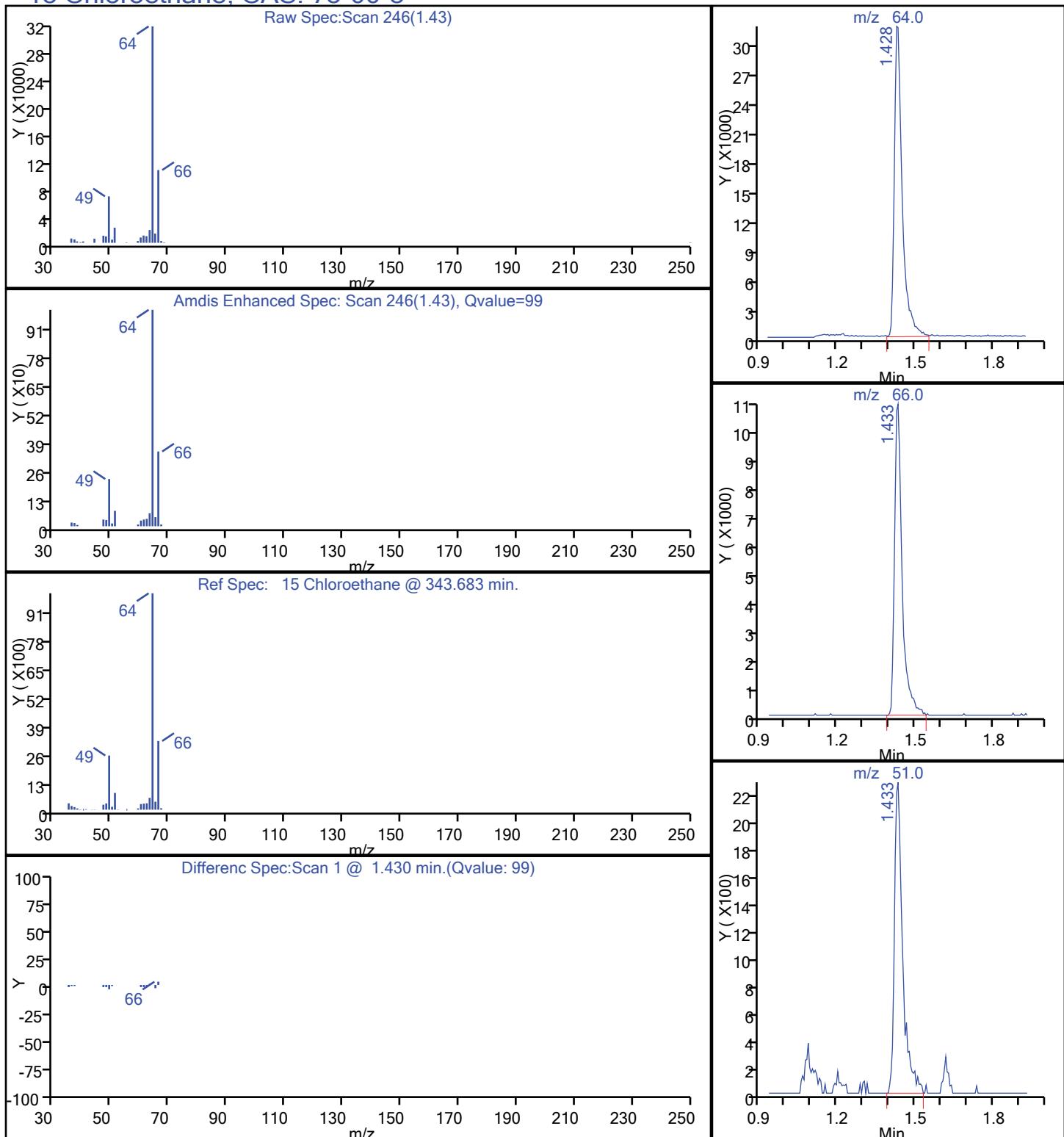
## 57 Benzene, CAS: 71-43-2



## TestAmerica Nashville

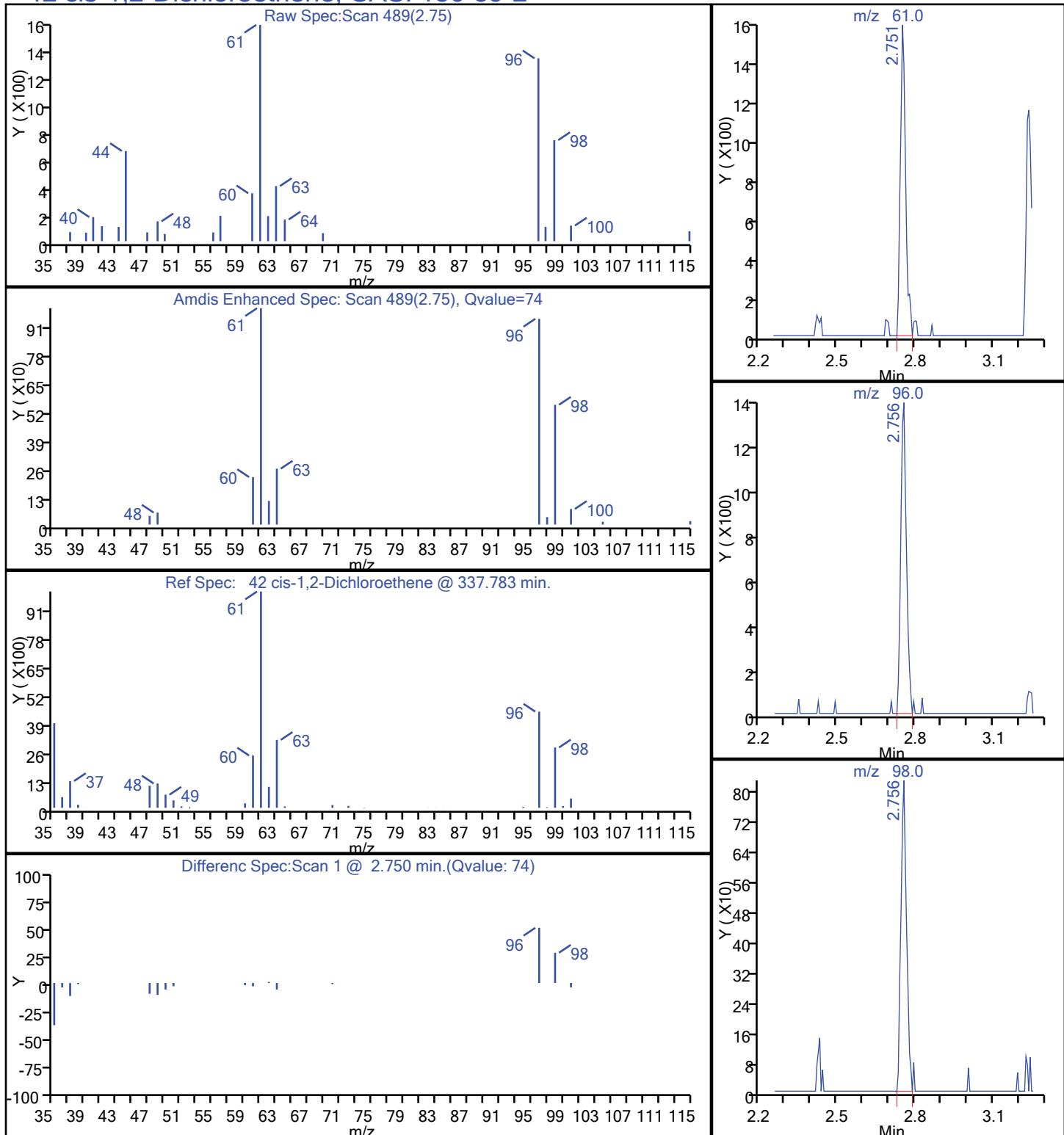
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 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 15 Chloroethane, CAS: 75-00-3



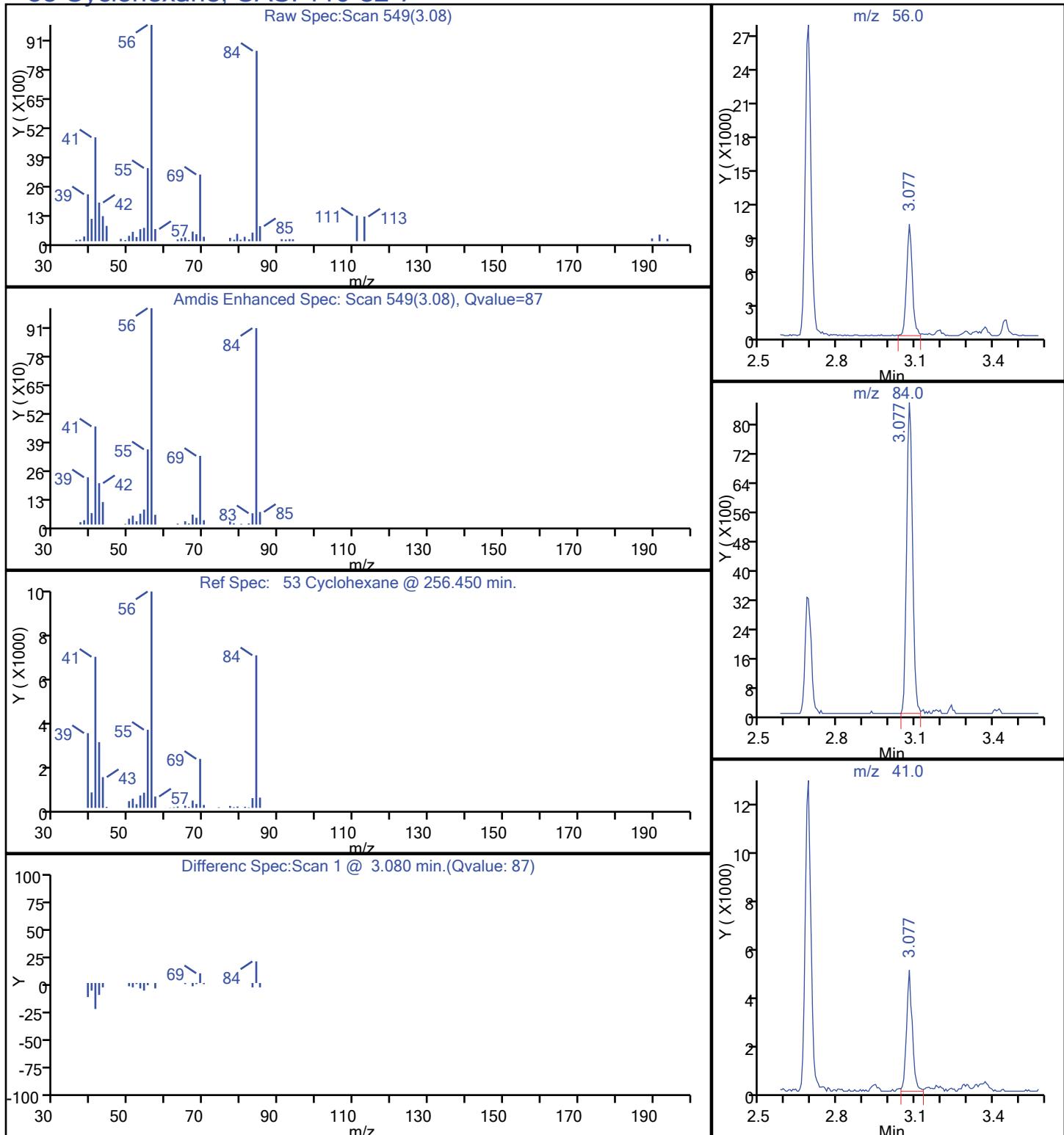
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 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 42 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 53 Cyclohexane, CAS: 110-82-7



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

Injection Date: 06-Jun-2015 07:58:30

Instrument ID: HP32

Lims ID: 490-79645-A-6

Lab Sample ID: 490-79645-6

Client ID: OB-11R-060115

Operator ID: EML

ALS Bottle#: 46 Worklist Smp#: 19

Purge Vol: 10.000 mL

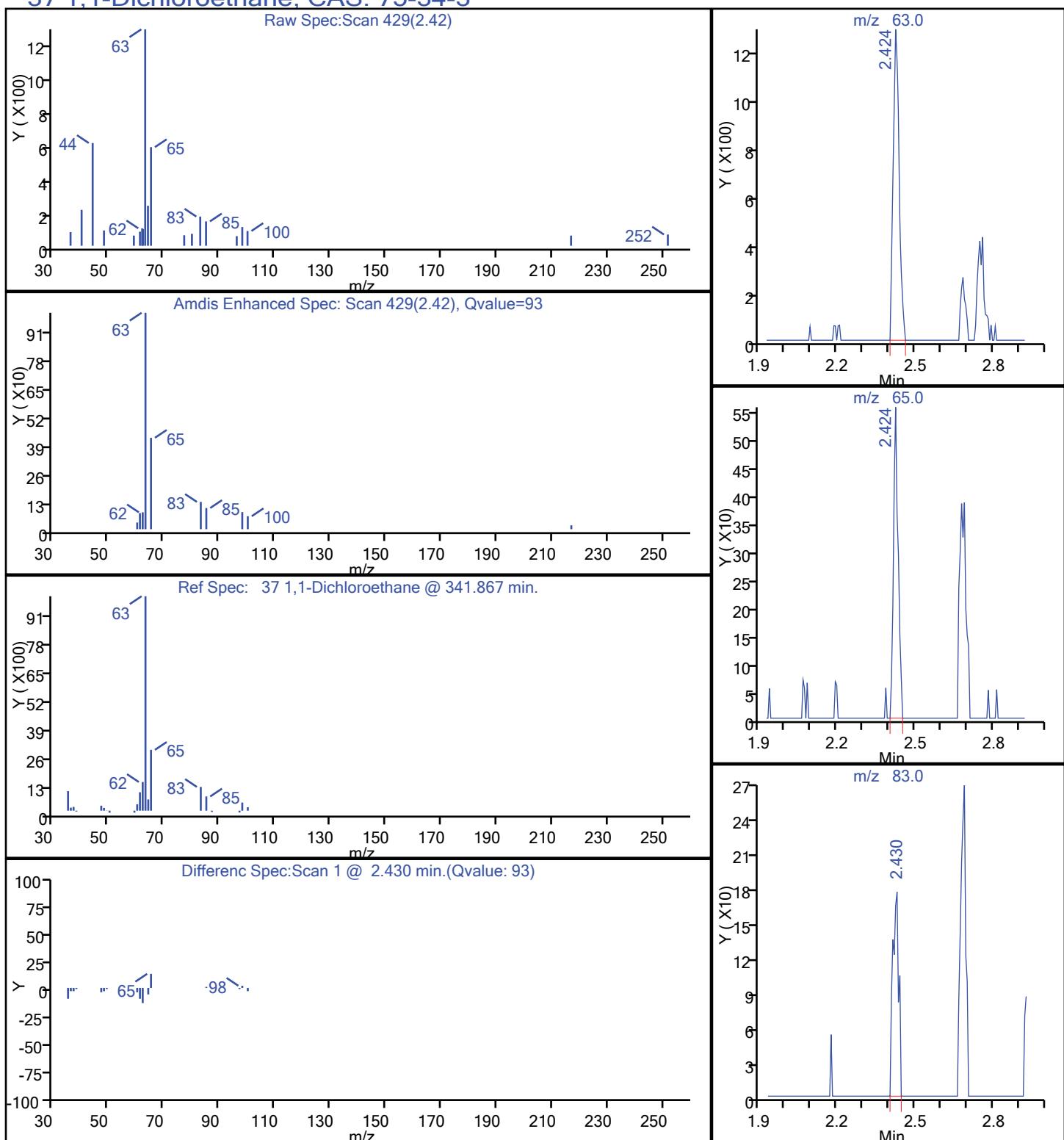
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

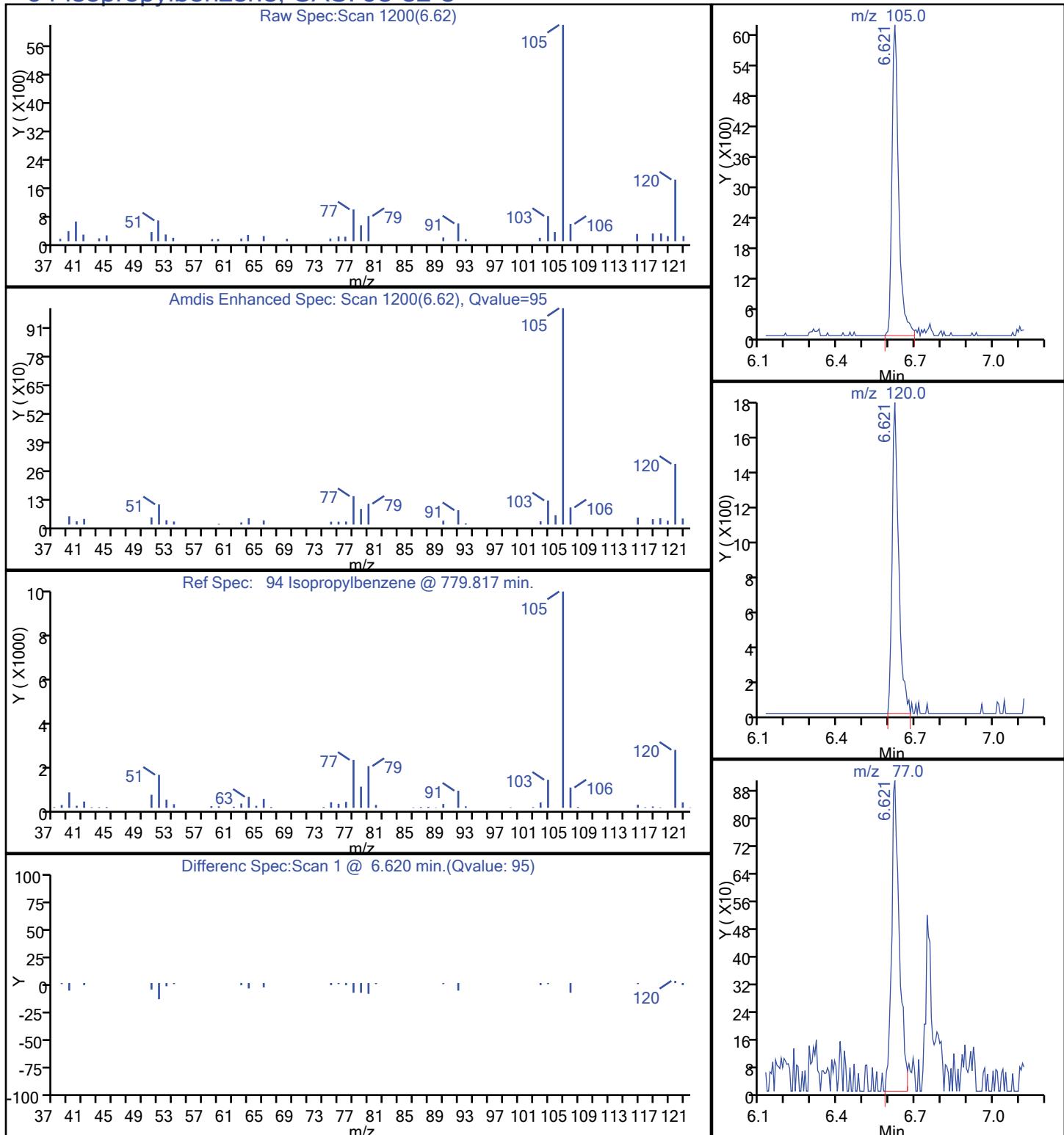
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Detector MS SCAN

**37 1,1-Dichloroethane, CAS: 75-34-3**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

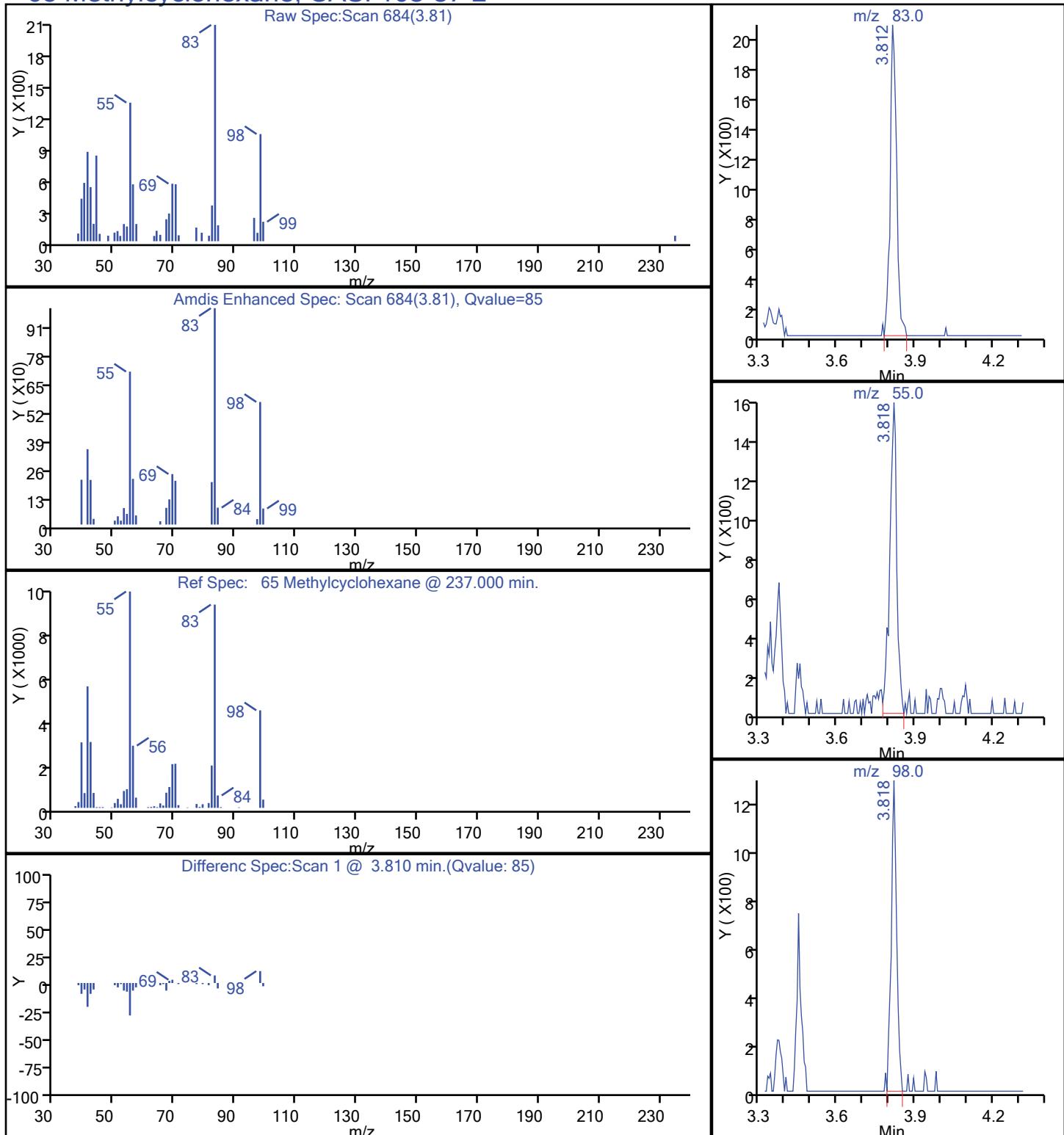
### 94 Isopropylbenzene, CAS: 98-82-8



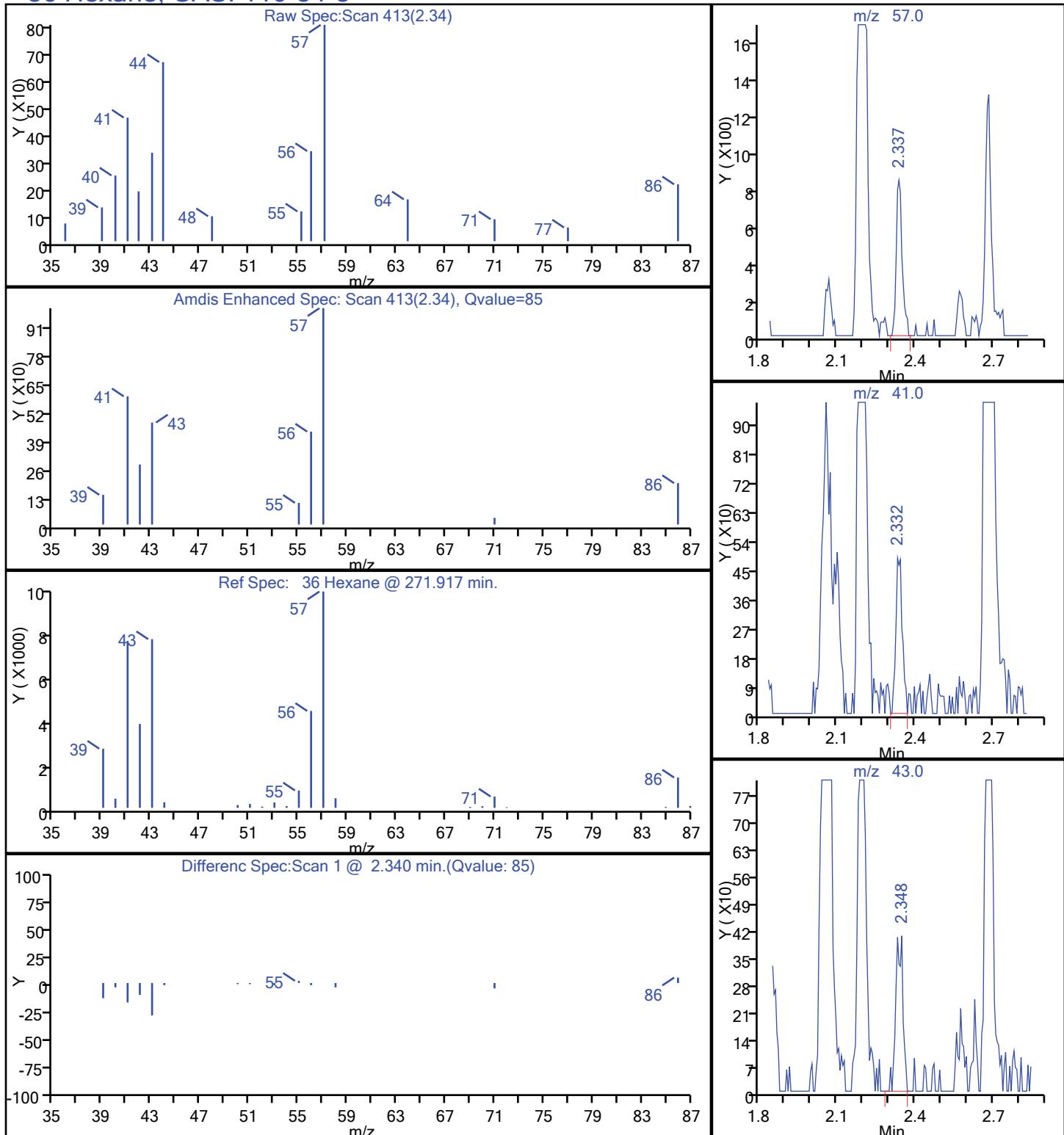
## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2

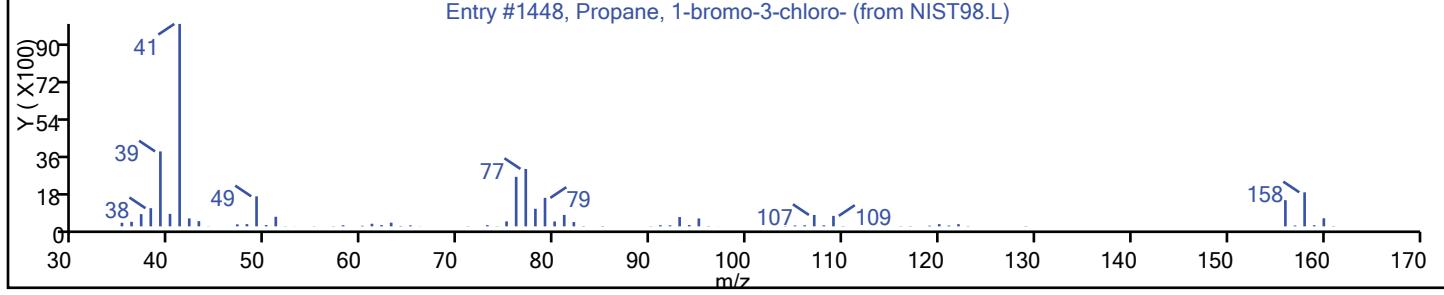
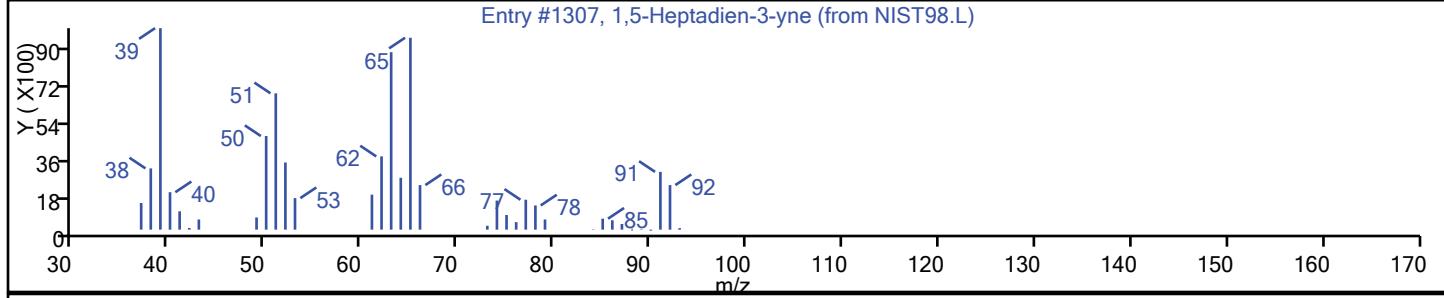
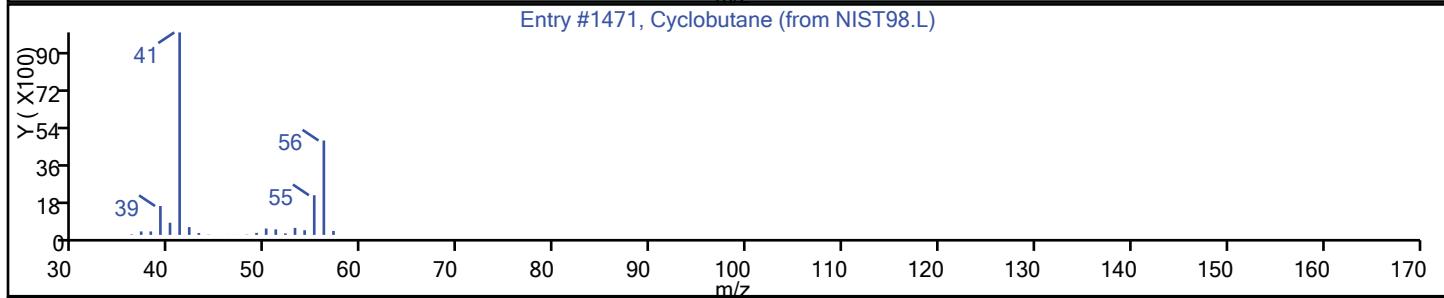
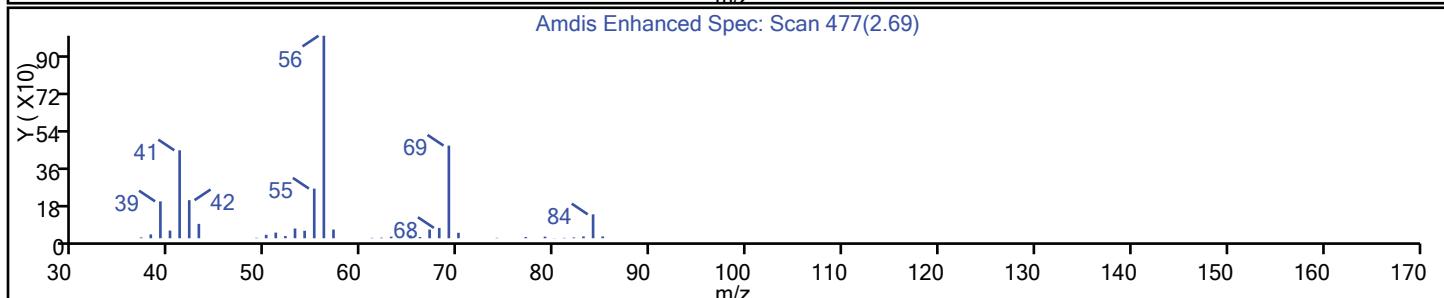
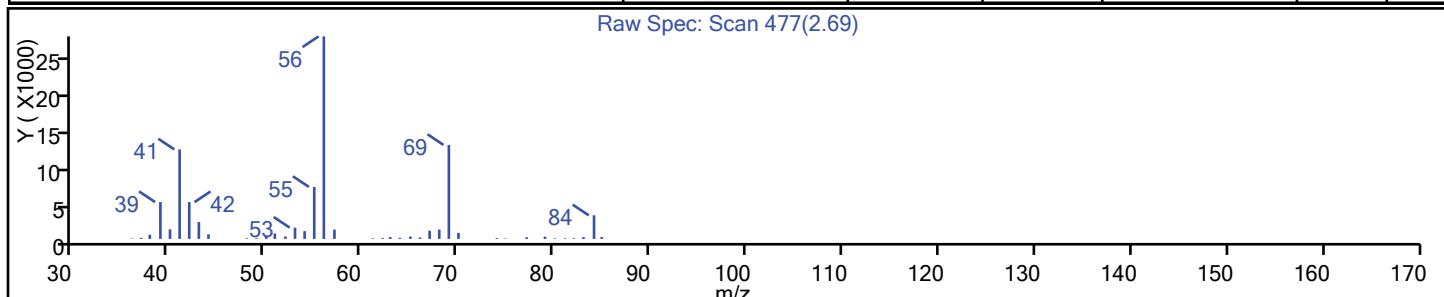


TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**36 Hexane, CAS: 110-54-3**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

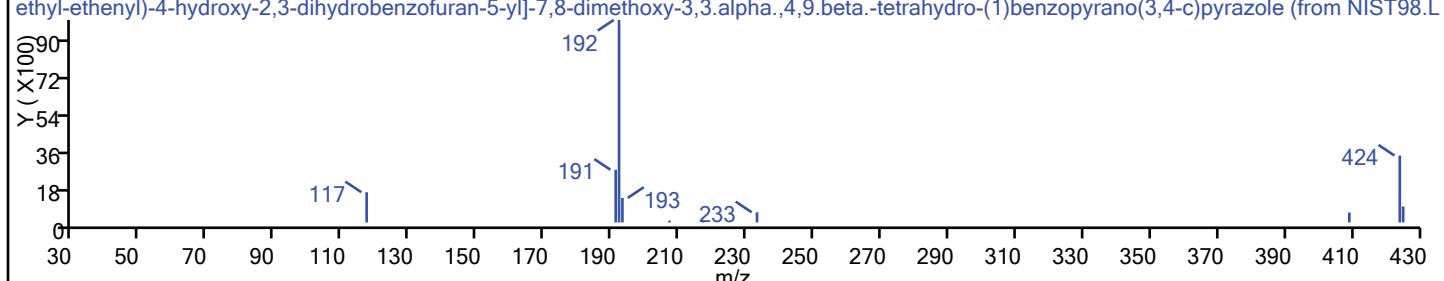
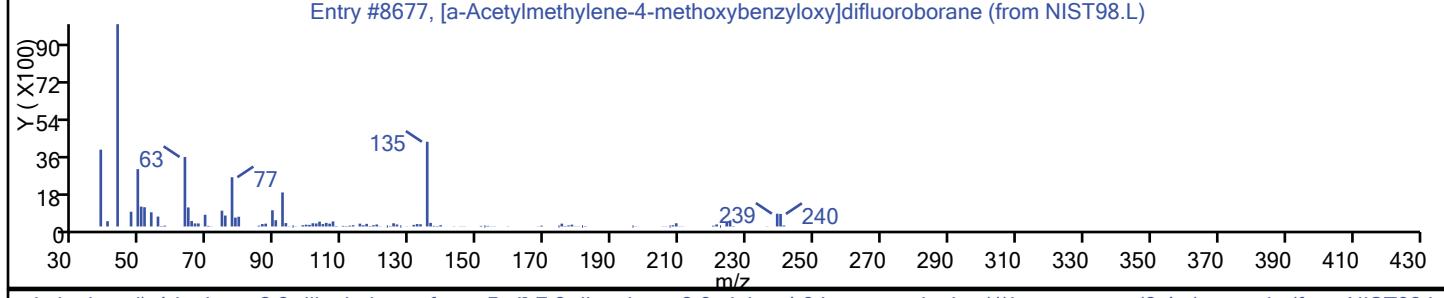
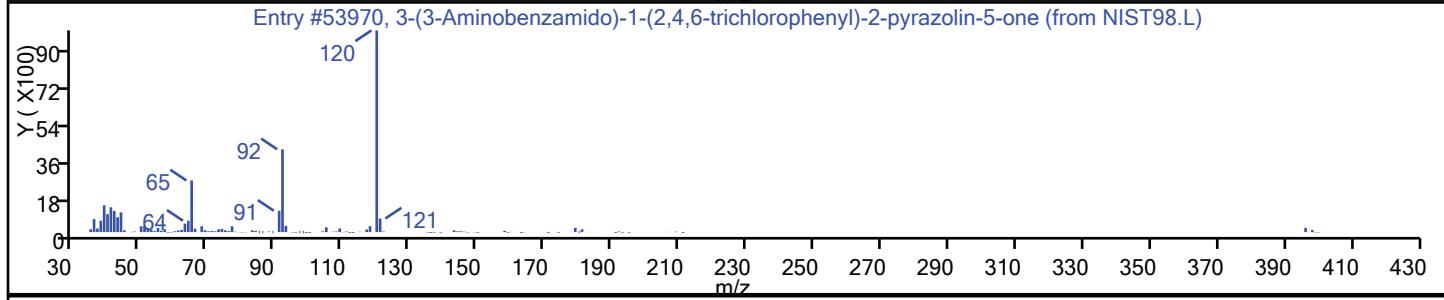
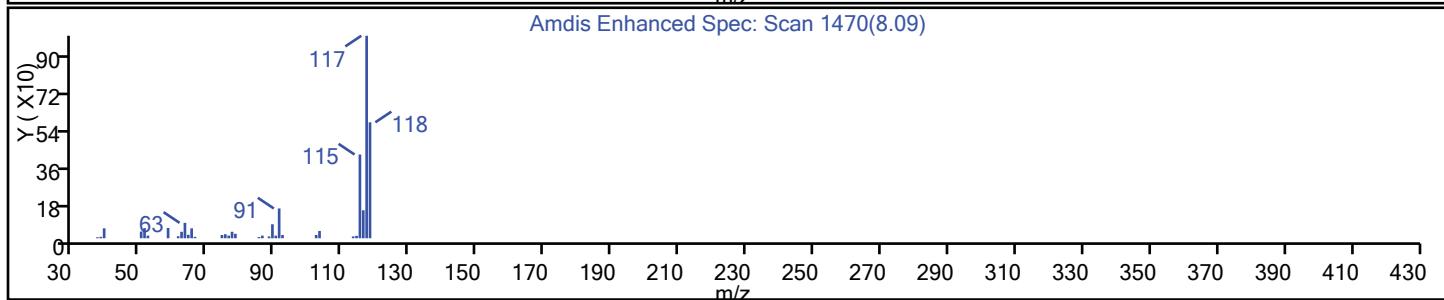
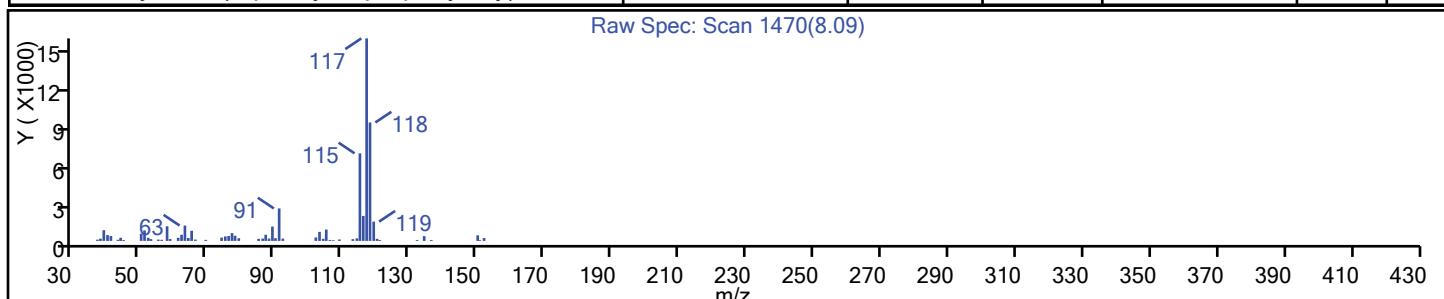
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Cyclopentane, methyl-	96-37-7	NIST98	1471	C6H12	84	94
1H-Tetrazole, 5-methyl-	4076-36-2	NIST98.L	1307	C2H4N4	84	80
Cyclobutane, ethyl-	4806-61-5	NIST98.L	1448	C6H12	84	78



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
trans-Cinnamyl bromide	26146-77-0	NIST98	53970	C9H9Br	196	64
Deltacyclene	7785-10-6	NIST98.L	8677	C9H10	118	59
Benzaldehyde, 4-(1-phenyl-2-propenyl)oxy)	1000277-56-1	NIST98.L	81154	C16H14O2	238	53



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

Injection Date: 06-Jun-2015 07:58:30

Instrument ID: HP32

Lims ID: 490-79645-A-6

Lab Sample ID: 490-79645-6

Client ID: OB-11R-060115

Operator ID: EML

ALS Bottle#: 46 Worklist Smp#: 19

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

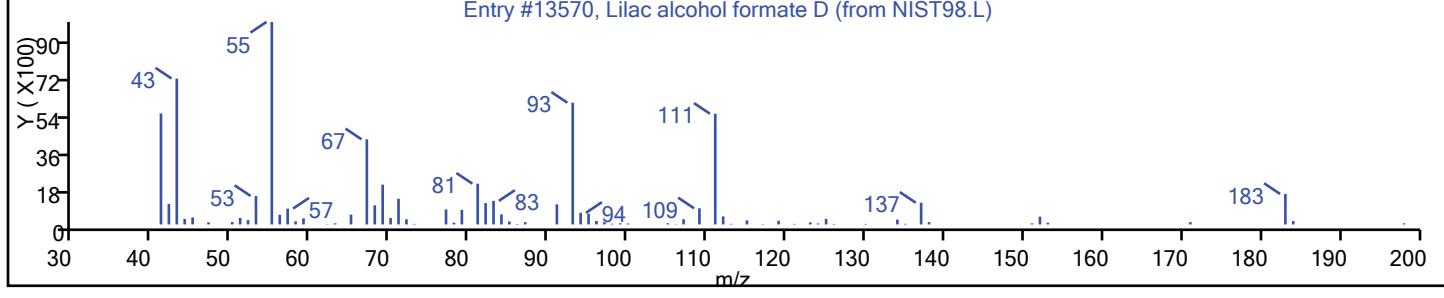
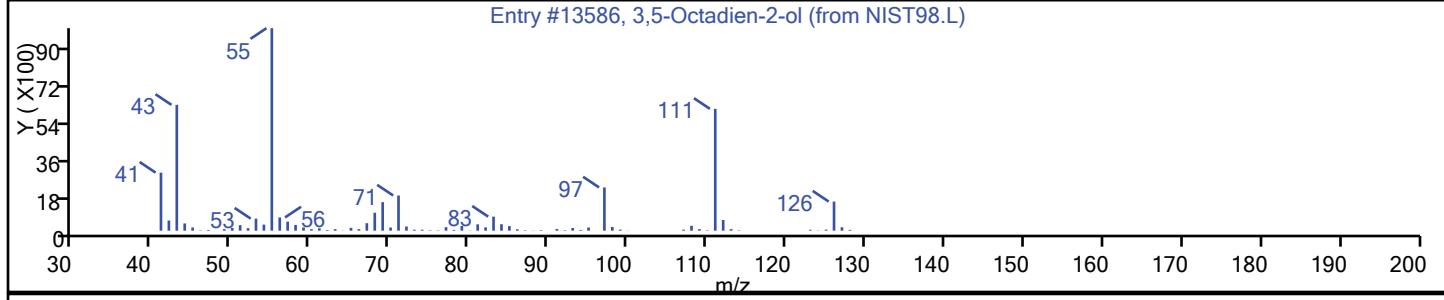
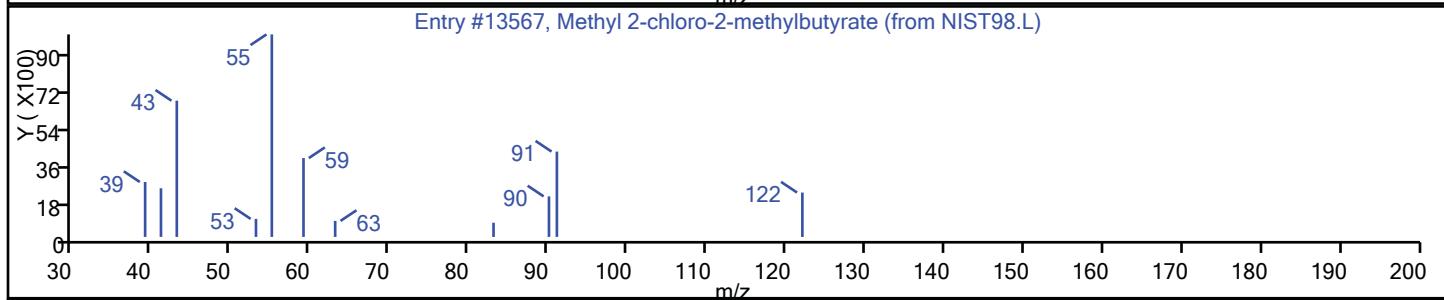
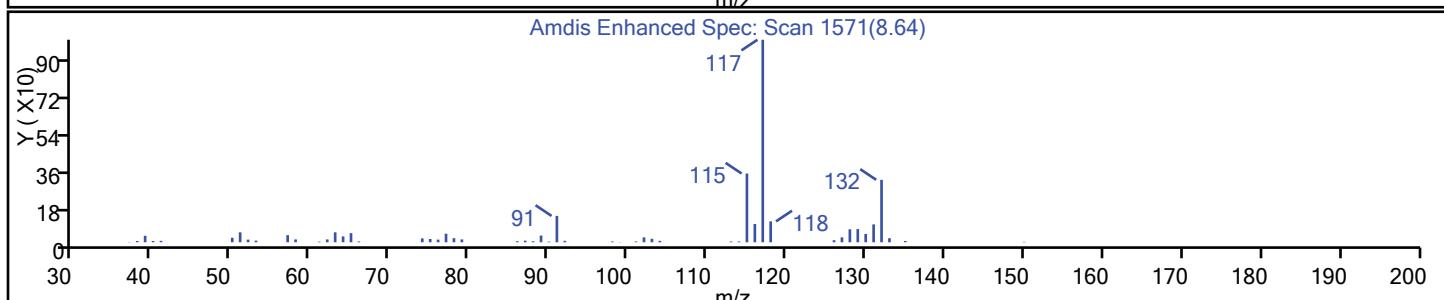
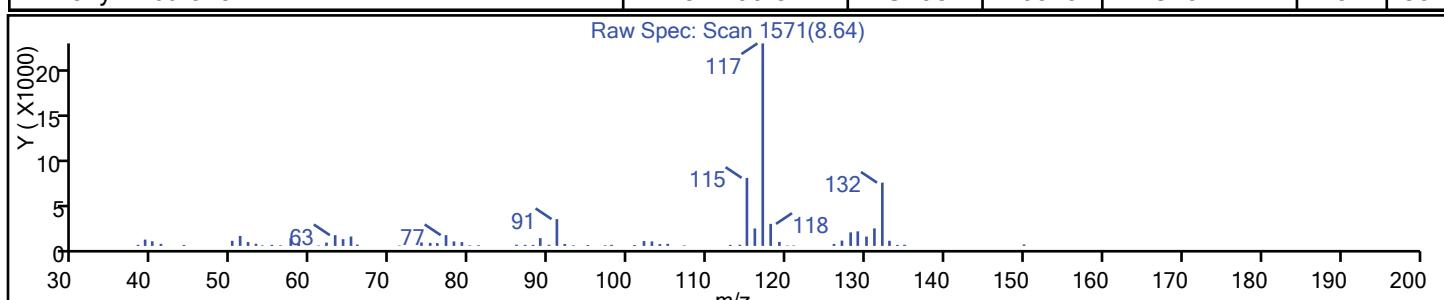
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

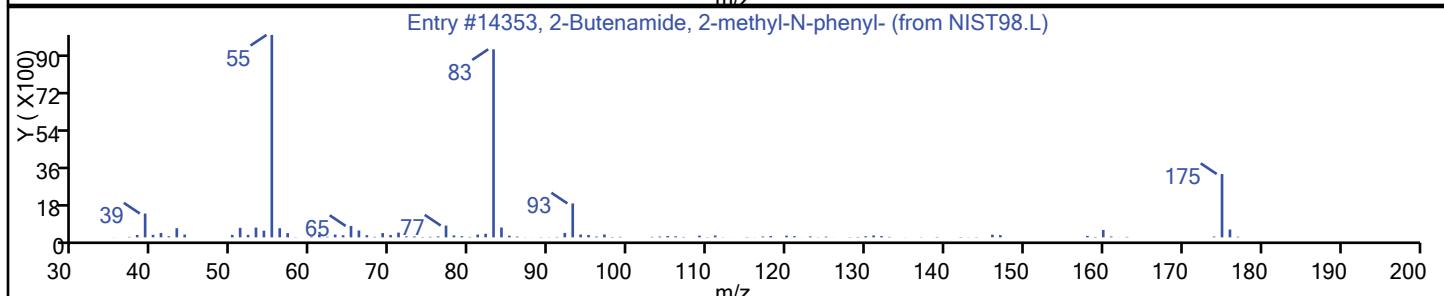
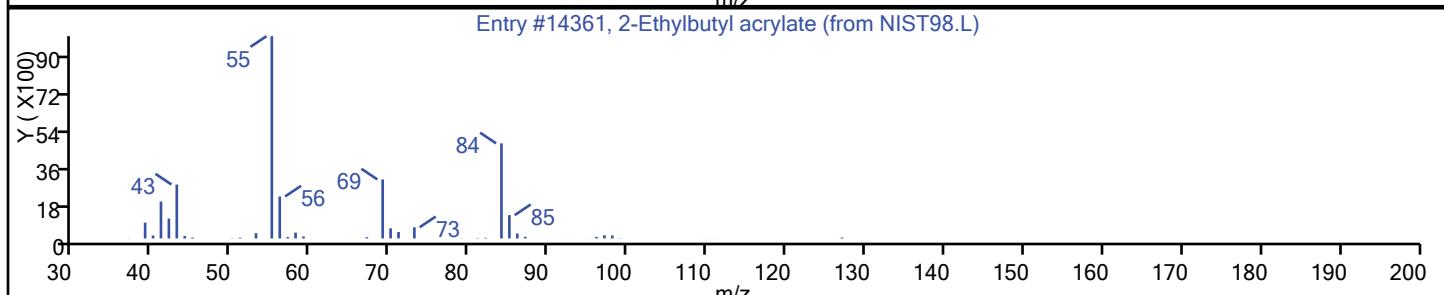
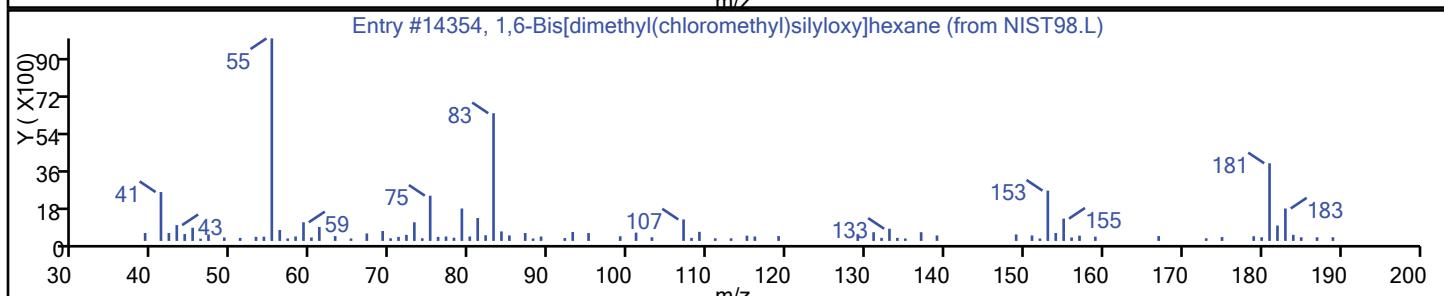
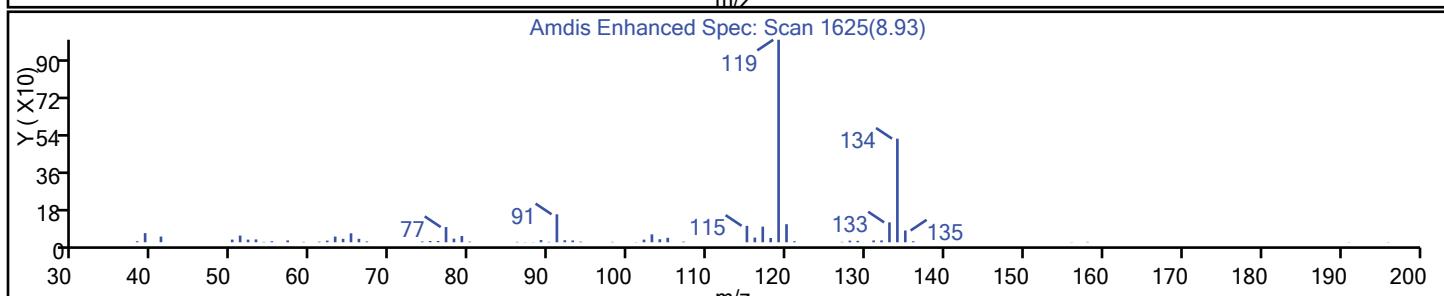
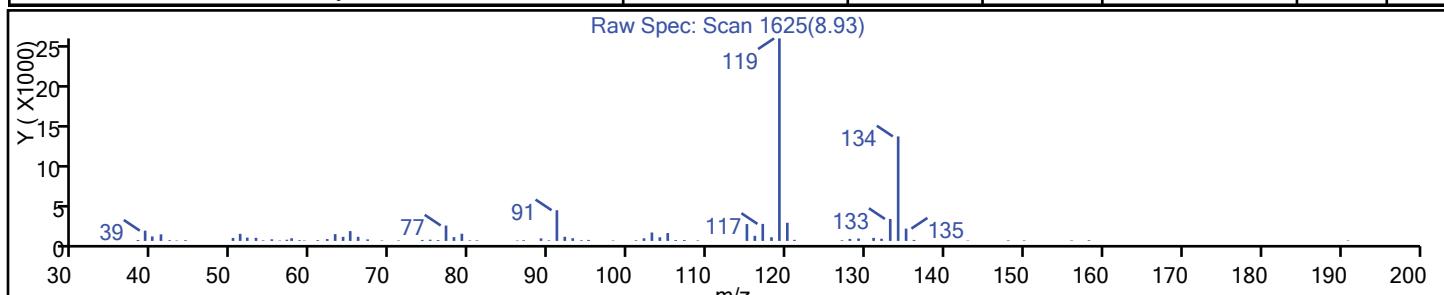
Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Indan, 1-methyl-	767-58-8	NIST98	13567	C10H12	132	87
Benzene, 1-ethenyl-3-ethyl-	7525-62-4	NIST98.L	13586	C10H12	132	87
1-Phenyl-1-butene	824-90-8	NIST98.L	13570	C10H12	132	80



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98	14354	C10H14	134	94
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98.L	14361	C10H14	134	94
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98.L	14353	C10H14	134	94



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

Injection Date: 06-Jun-2015 07:58:30

Instrument ID: HP32

Lims ID: 490-79645-A-6

Lab Sample ID: 490-79645-6

Client ID: OB-11R-060115

Operator ID: EML

ALS Bottle#: 46 Worklist Smp#: 19

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

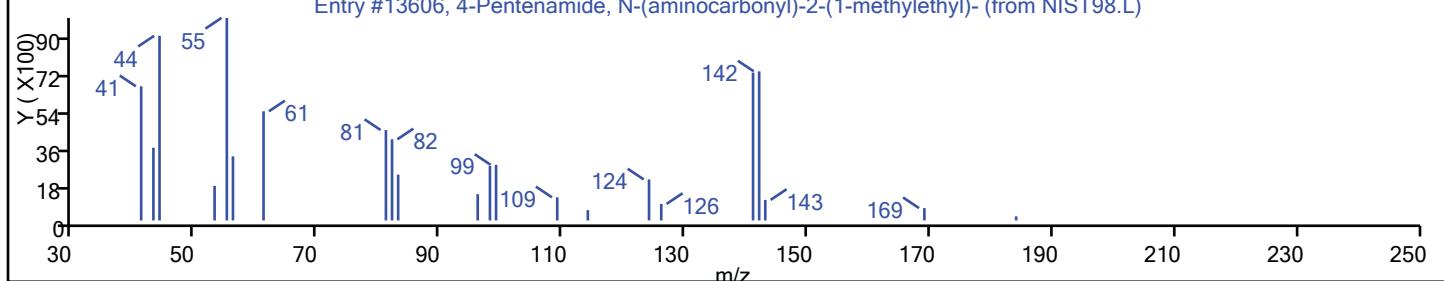
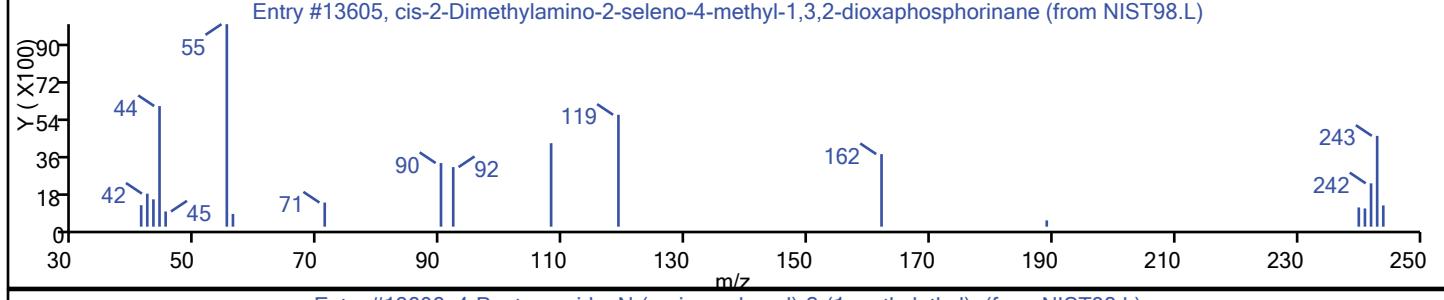
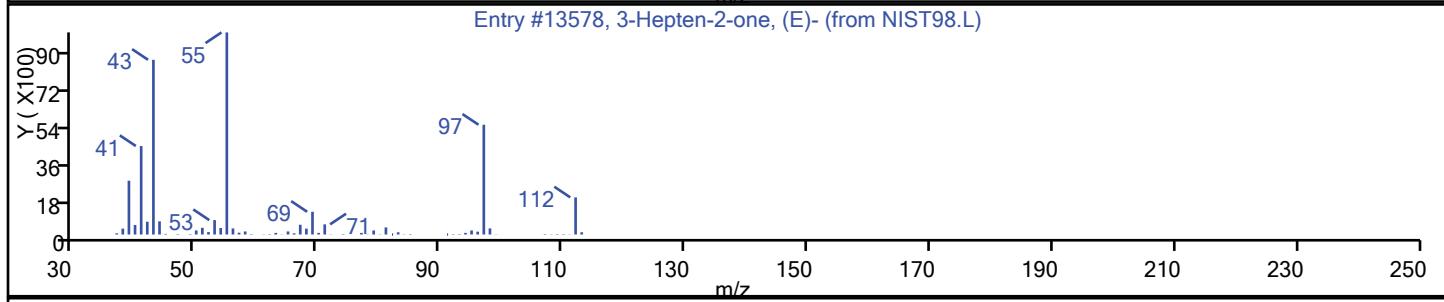
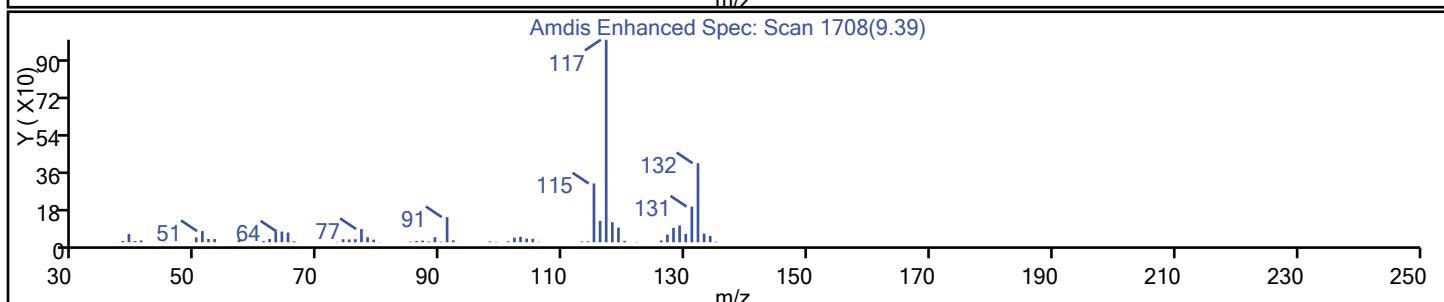
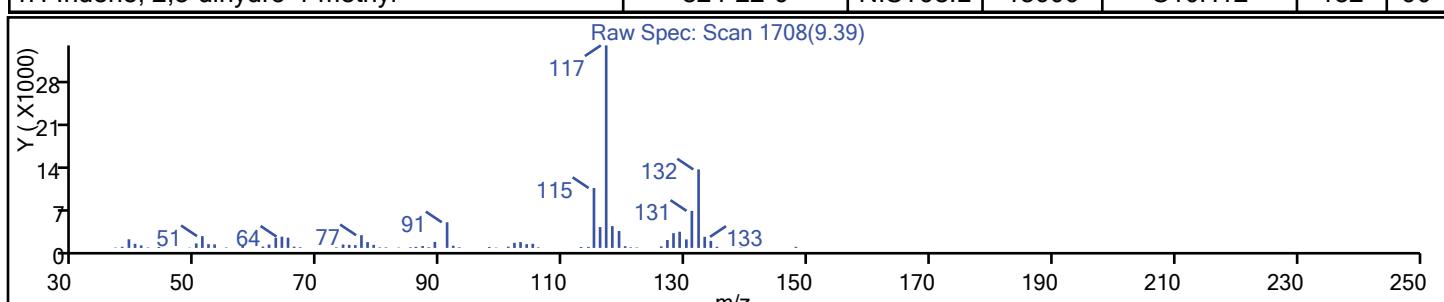
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

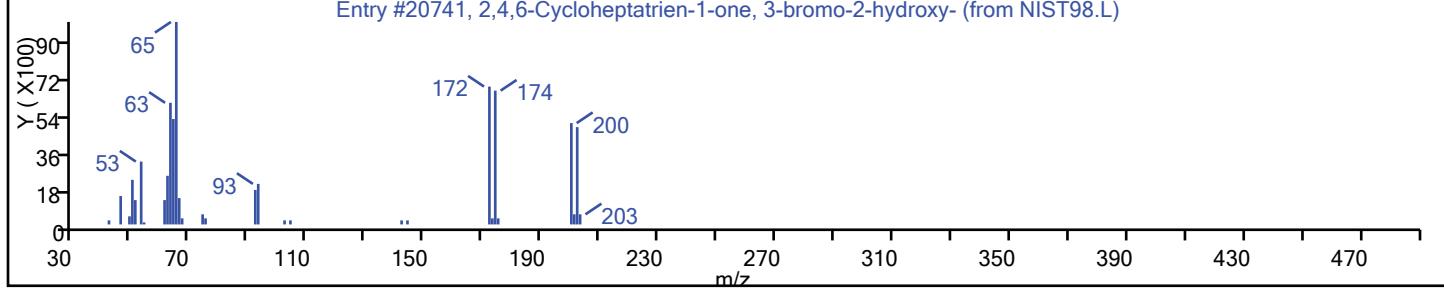
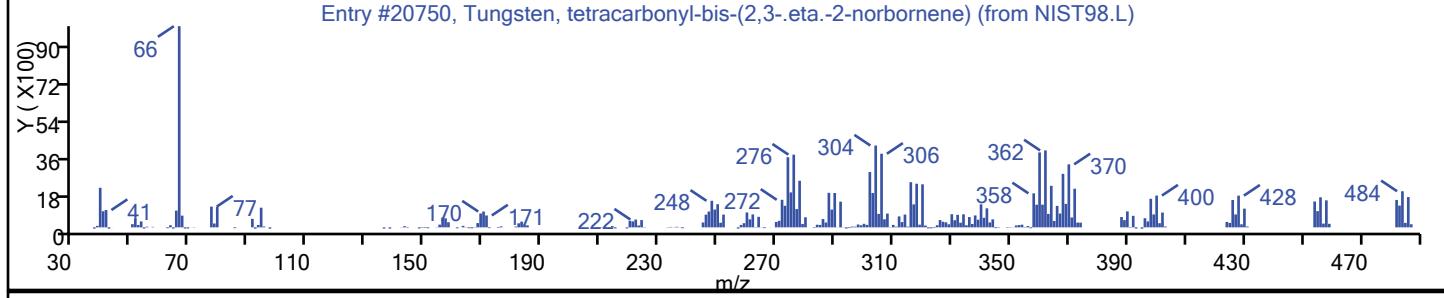
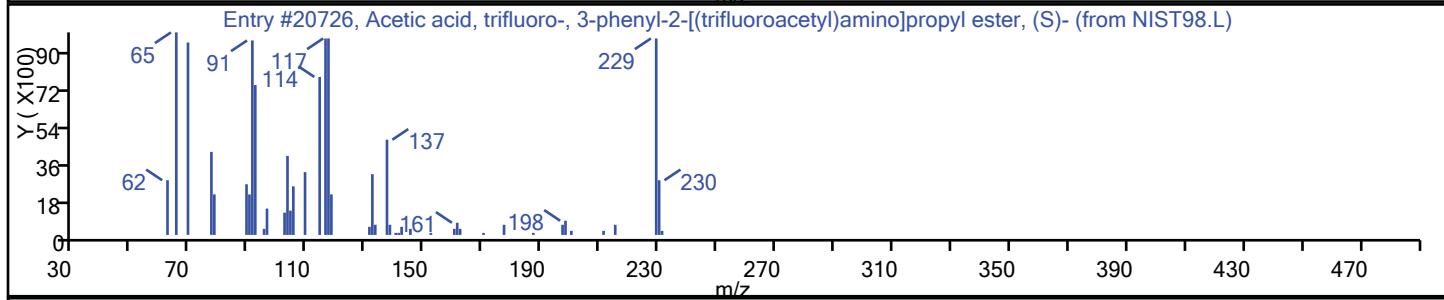
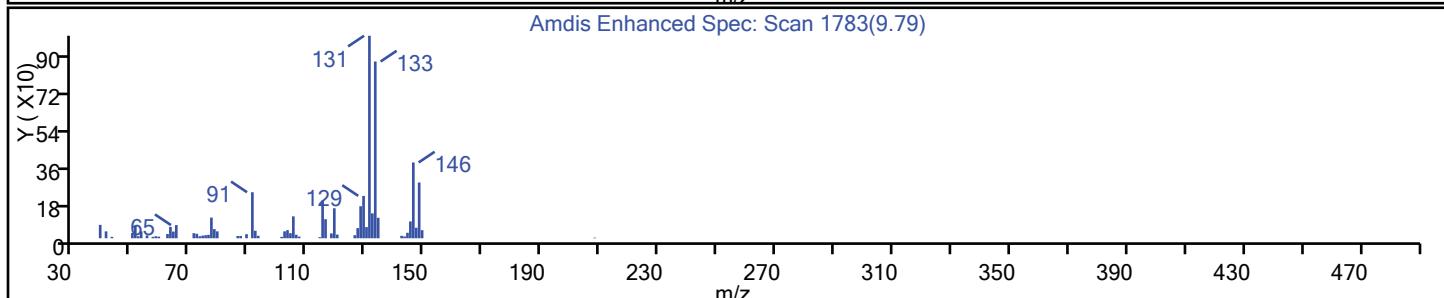
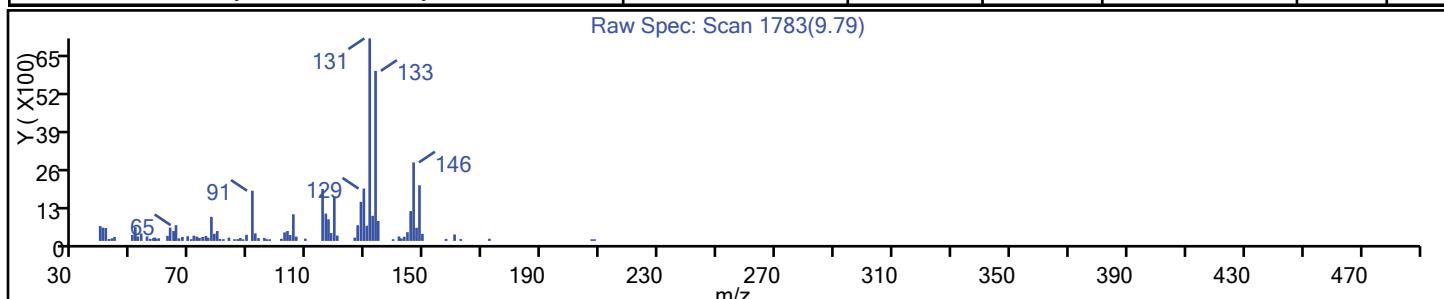
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2-butenyl-	1560-06-1	NIST98	13578	C10H12	132	91
1H-Indene, 2,3-dihydro-5-methyl-	874-35-1	NIST98.L	13605	C10H12	132	90
1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	NIST98.L	13606	C10H12	132	90



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D  
 Injection Date: 06-Jun-2015 07:58:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-6 Lab Sample ID: 490-79645-6  
 Client ID: OB-11R-060115  
 Operator ID: EML ALS Bottle#: 46 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, (3-methyl-2-butenyl)-	4489-84-3	NIST98	20726	C11H14	146	70
.alpha.,.beta.,.beta.-Trimethylstyrene	769-57-3	NIST98.L	20750	C11H14	146	64
1H-Indene, 2,3-dihydro-1,2-dimethyl-	17057-82-8	NIST98.L	20741	C11H14	146	50



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

Injection Date: 06-Jun-2015 07:58:30

Instrument ID: HP32

Lims ID: 490-79645-A-6

Lab Sample ID: 490-79645-6

Client ID: OB-11R-060115

Operator ID: EML

ALS Bottle#: 46 Worklist Smp#: 19

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

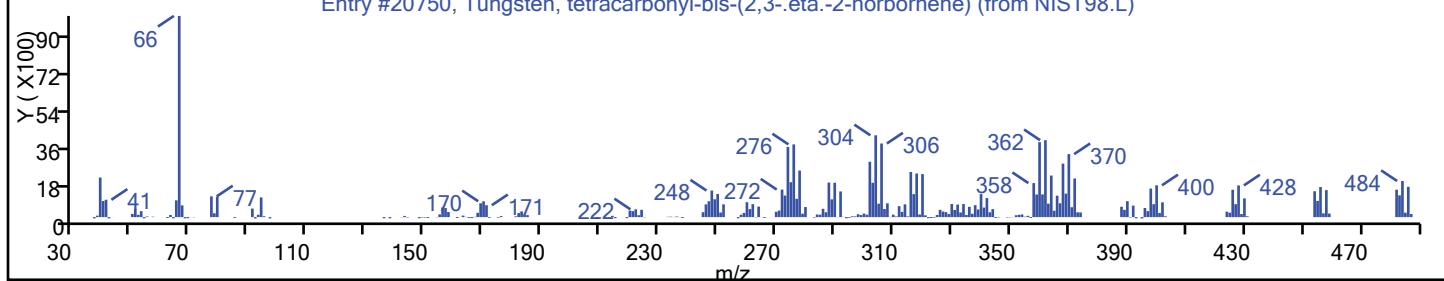
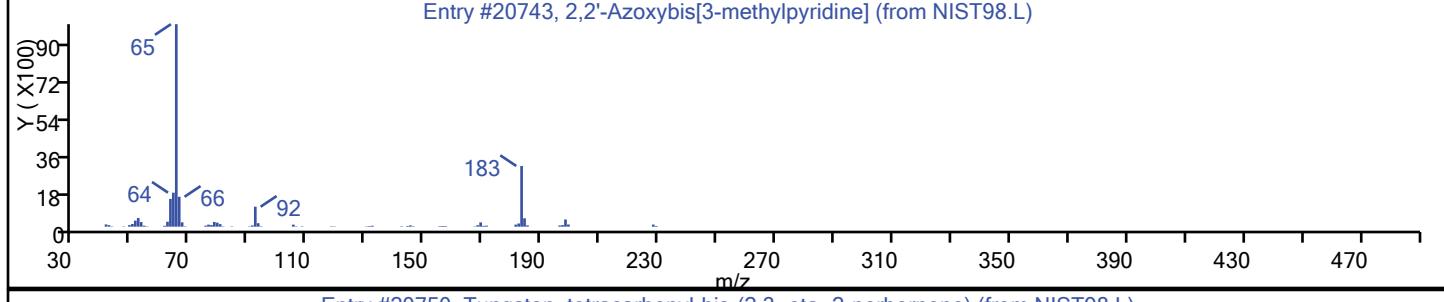
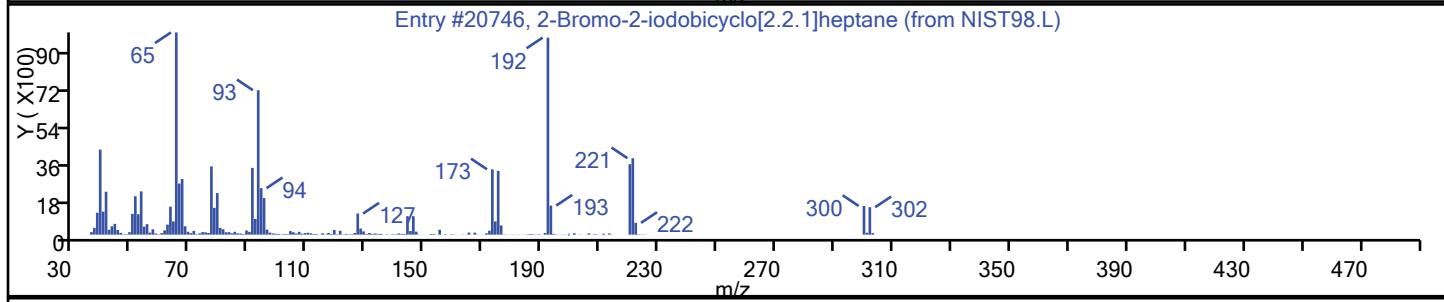
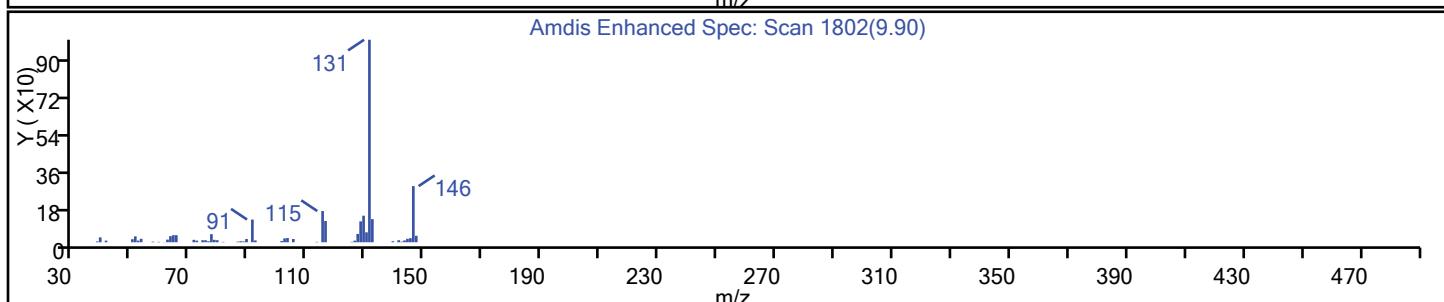
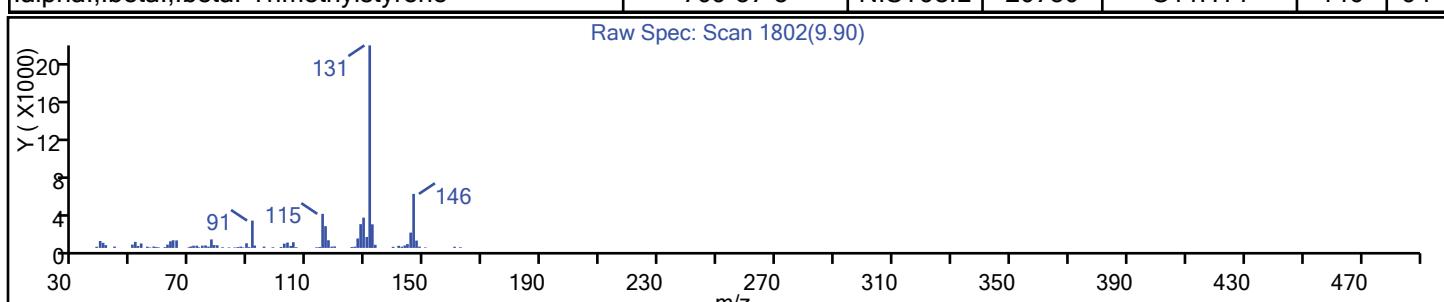
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	NIST98	20746	C11H14	146	94
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	NIST98.L	20743	C11H14	146	94
.alpha.,.beta.,.beta.-Trimethylstyrene	769-57-3	NIST98.L	20750	C11H14	146	94



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-46.D

Injection Date: 06-Jun-2015 07:58:30

Instrument ID: HP32

Lims ID: 490-79645-A-6

Lab Sample ID: 490-79645-6

Client ID: OB-11R-060115

Operator ID: EML

ALS Bottle#: 46 Worklist Smp#: 19

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

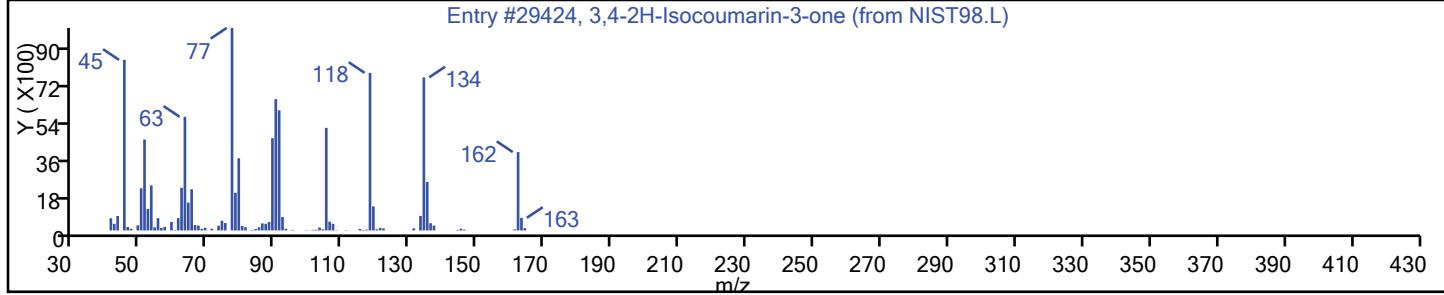
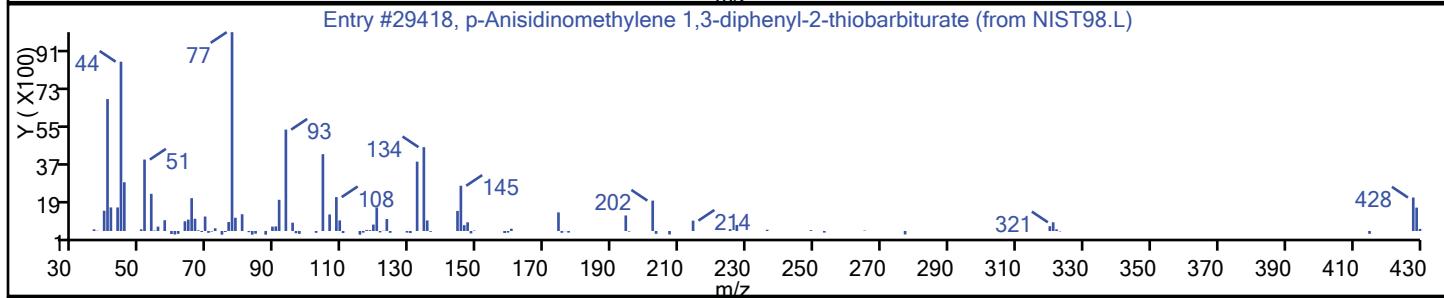
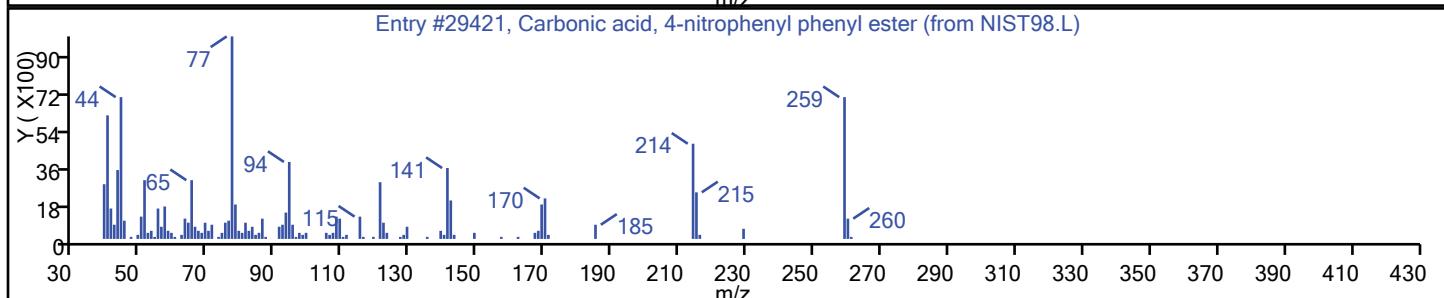
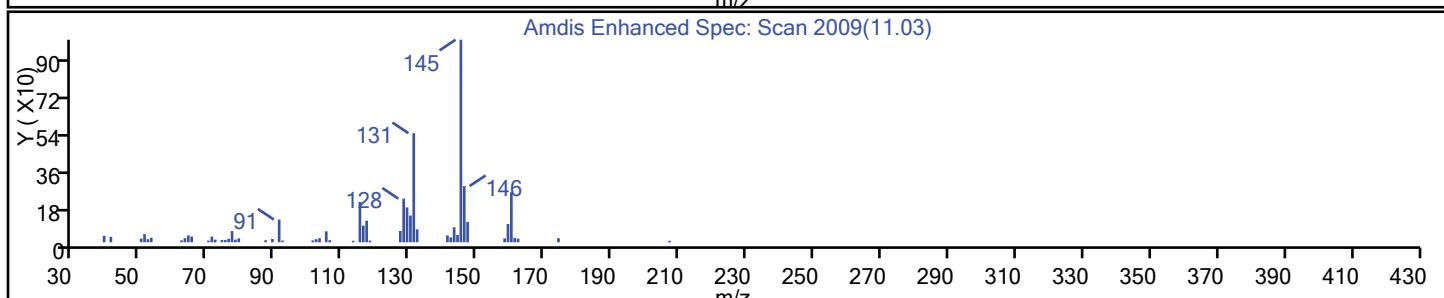
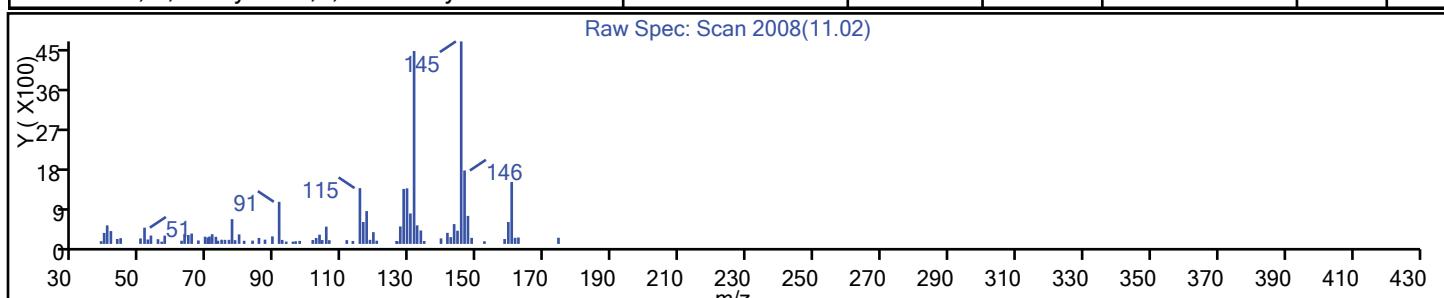
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1H-Indene, 2,3-dihydro-4,5,7-trimethyl-	6682-06-0	NIST98	29421	C12H16	160	70
1H-Indene, 2,3-dihydro-1,5,7-trimethyl-	54340-88-4	NIST98.L	29418	C12H16	160	64
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	2613-76-5	NIST98.L	29424	C12H16	160	62



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SR-3-SEEP-060115

Lab Sample ID: 490-79645-7

Matrix: Ground Water

Lab File ID: 060815-21.D

Analysis Method: 8260C

Date Collected: 06/01/2015 14:05

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 19:37

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	4.5	J	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SR-3-SEEP-060115 Lab Sample ID: 490-79645-7

Matrix: Ground Water Lab File ID: 060815-21.D

Analysis Method: 8260C Date Collected: 06/01/2015 14:05

Sample wt/vol: 10 (mL) Date Analyzed: 06/08/2015 19:37

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 254379 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	107		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: SR-3-SEEP-060115 Lab Sample ID: 490-79645-7  
Matrix: Ground Water Lab File ID: 060815-21.D  
Analysis Method: 8260C Date Collected: 06/01/2015 14:05  
Sample wt/vol: 10 (mL) Date Analyzed: 06/08/2015 19:37  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 254379 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-21.D  
 Lims ID: 490-79645-A-7 Lab Sample ID: 490-79645-7  
 Client ID: SR-3-SEEP-060115  
 Sample Type: Client  
 Inject. Date: 08-Jun-2015 19:37:30 ALS Bottle#: 21 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-7  
 Misc. Info.: 490-0056175-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:14:36 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:14:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.451	3.450	0.001	99	419024	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.714	0.001	84	297732	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.827	7.821	0.006	93	145820	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.025	0.001	94	97869	24.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.237	0.001	0	83076	23.4	
\$ 6 Toluene-d8 (Surr)	98	4.556	4.555	0.001	92	394721	26.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.755	6.748	0.007	95	122166	28.3	
23 Acetone	58	1.850	1.844	0.006	99	876	4.52	
42 cis-1,2-Dichloroethene	61	2.748	2.747	0.001	73	882	0.1266	
44 2-Butanone (MEK)	72	2.786	2.764	0.022	92	159	0.6479	
53 Cyclohexane	56	3.075	3.074	0.001	81	848	0.1107	
57 Benzene	78	3.287	3.275	0.012	91	1505	0.0791	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-21.D  
 Lims ID: 490-79645-A-7 Lab Sample ID: 490-79645-7  
 Client ID: SR-3-SEEP-060115  
 Sample Type: Client  
 Inject. Date: 08-Jun-2015 19:37:30 ALS Bottle#: 21 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-7  
 Misc. Info.: 490-0056175-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 10:14:36 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:14:49

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.755 122166

**Reagents:**

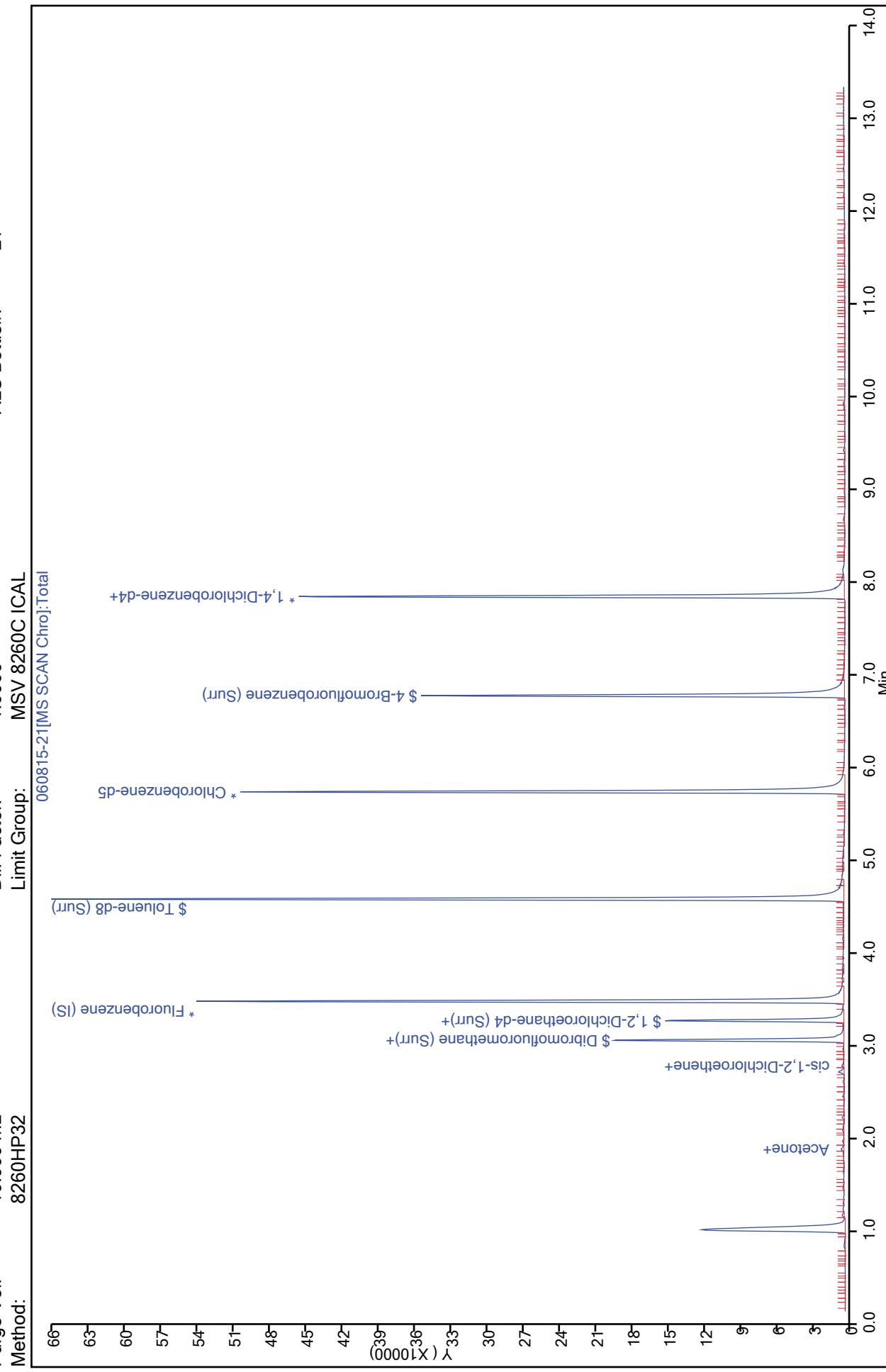
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 10:14:50

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-21.D  
Injection Date: 08-Jun-2015 19:37:30  
Lims ID: 490-79645-A-7  
Client ID: SR-3-SEEP-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 19  
Instrument ID: HP32  
Lab Sample ID: 490-79645-7  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-21.D

Injection Date: 08-Jun-2015 19:37:30

Instrument ID: HP32

Lims ID: 490-79645-A-7

Lab Sample ID: 490-79645-7

Client ID: SR-3-SEEP-060115

Operator ID: EML

ALS Bottle#: 21 Worklist Smp#: 19

Purge Vol: 10.000 mL

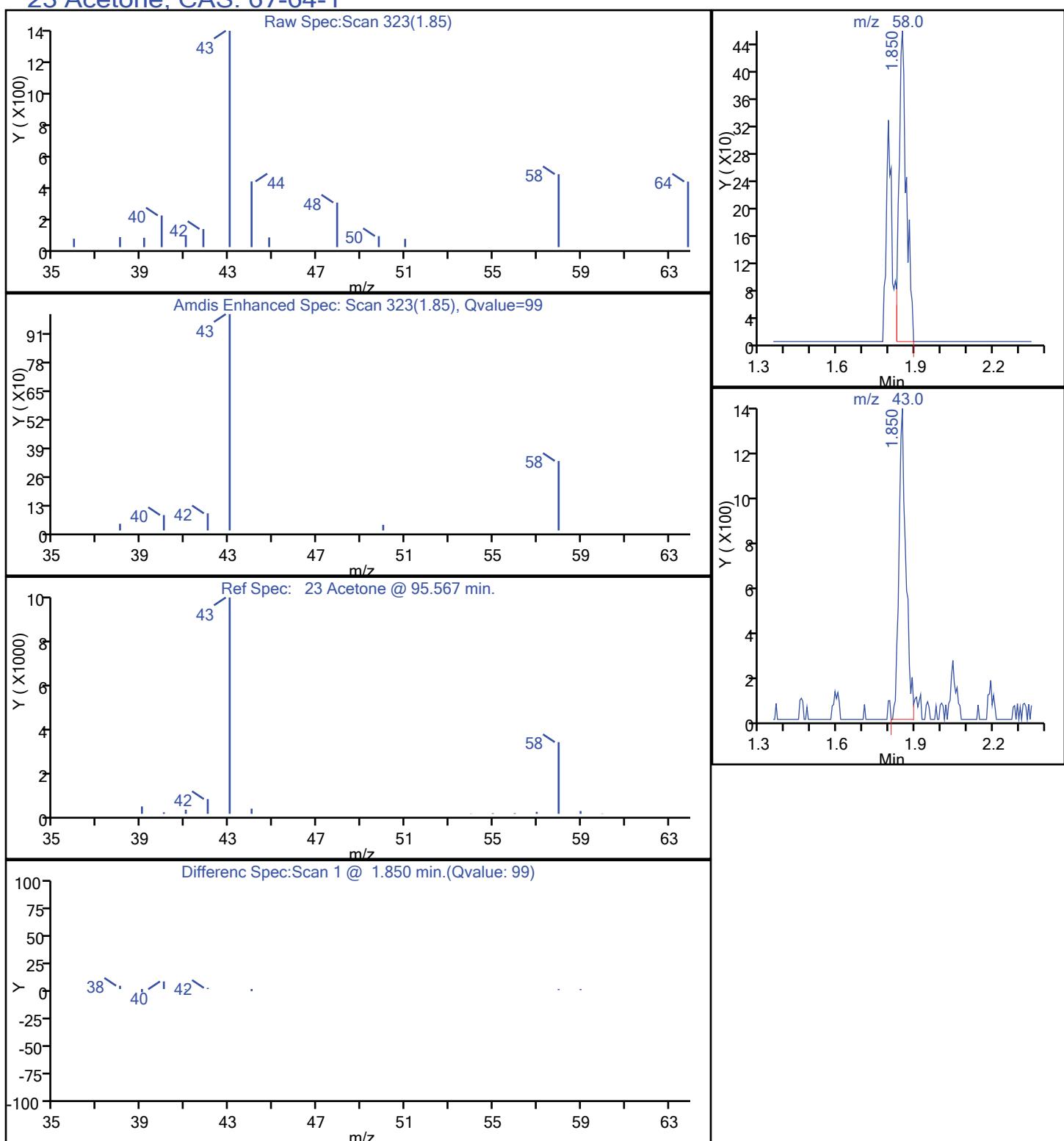
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**23 Acetone, CAS: 67-64-1**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: RW-6A-060115

Lab Sample ID: 490-79645-8

Matrix: Ground Water

Lab File ID: 060815-22.D

Analysis Method: 8260C

Date Collected: 06/01/2015 15:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 20:05

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	9.1		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	1.8		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	2.7		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.18	J	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.28	J	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	4.6		1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.72		0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Client Sample ID: RW-6A-060115 Lab Sample ID: 490-79645-8  
Matrix: Ground Water Lab File ID: 060815-22.D  
Analysis Method: 8260C Date Collected: 06/01/2015 15:50  
Sample wt/vol: 10 (mL) Date Analyzed: 06/08/2015 20:05  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 254379 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.61		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	106		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: RW-6A-060115 Lab Sample ID: 490-79645-8  
 Matrix: Ground Water Lab File ID: 060815-22.D  
 Analysis Method: 8260C Date Collected: 06/01/2015 15:50  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/08/2015 20:05  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 254379 Units: ug/L  
 Number TICs Found: 15 TIC Result Total: 131

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		12	J
96-37-7	Cyclopentane, methyl-	2.68	8.1	J N
103-65-1	N-Propylbenzene	7.00	4.7	
108-67-8	1,3,5-Trimethylbenzene	7.16	1.4	
526-73-8	Benzene, 1,2,3-trimethyl-	7.90	20	J N
4439-45-6	Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi	8.08	17	J N
1074-55-1	Benzene, 1-methyl-4-propyl-	8.36	2.6	J N
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	8.55	13	J N
767-58-8	Indan, 1-methyl-	8.64	5.7	J N
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	8.84	3.8	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.93	11	J N
527-53-7	Benzene, 1,2,3,5-tetramethyl-	8.98	4.6	J N
934-10-1	3-Phenylbut-1-ene	9.23	4.2	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.38	15	J N
91-20-3	Naphthalene	10.08	7.9	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-22.D  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Sample Type: Client  
 Inject. Date: 08-Jun-2015 20:05:30 ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-8  
 Misc. Info.: 490-0056175-020  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 11:21:47 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 11:21:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.451	3.450	0.001	99	417995	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.714	0.001	83	301986	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.822	7.821	0.001	94	157039	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.025	0.001	94	97874	24.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.237	0.002	0	84534	23.8	
\$ 6 Toluene-d8 (Surr)	98	4.556	4.555	0.001	92	396124	26.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.750	6.748	0.002	96	131694	28.4	
15 Chloroethane	64	1.431	1.430	0.001	98	6280	1.82	
37 1,1-Dichloroethane	63	2.428	2.421	0.007	95	2159	0.2754	
42 cis-1,2-Dichloroethene	61	2.754	2.747	0.007	64	646	0.0930	
53 Cyclohexane	56	3.075	3.074	0.001	85	20533	2.69	
57 Benzene	78	3.277	3.275	0.002	94	173193	9.12	
65 Methylcyclohexane	83	3.816	3.814	0.002	83	6196	0.7233	
76 Toluene	91	4.610	4.604	0.006	99	12618	0.6149	
87 Chlorobenzene	112	5.743	5.736	0.007	87	1910	0.1469	
89 Ethylbenzene	91	5.851	5.828	0.023	97	2162	0.1053	
90 m-Xylene & p-Xylene	91	5.949	5.932	0.017	0	6022	0.3749	
91 o-Xylene	91	6.298	6.280	0.018	93	1429	0.0896	
94 Isopropylbenzene	105	6.614	6.612	0.002	95	92529	4.62	
110 1,4-Dichlorobenzene	146	7.855	7.843	0.012	80	1785	0.1831	
113 1,2-Dichlorobenzene	146	8.214	8.191	0.023	45	915	0.1118	
S 134 Xylenes, Total	1				0		0.4645	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-22.D  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Sample Type: Client  
 Inject. Date: 08-Jun-2015 20:05:30 ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-8  
 Misc. Info.: 490-0056175-020  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 11:21:47 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 11:21:47

Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
N-Propylbenzene	6.995	100532	4.73	
1,3,5-Trimethylbenzene	7.163	21401	1.37	
n-Butylbenzene	8.209	13170	0.9595	
Naphthalene	10.076	57210	7.90	

Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpdn	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
96-37-7	Cyclopentane, methyl-							
2.683	273069	8.09	1	94	1471	C6H12	84	
526-73-8	Benzene, 1,2,3-trimethyl-							
7.898	662581	19.8	3	95	9123	C9H12	120	
4439-45-6	Benzene, 1,1'-(1,5-hexadiene-1,6-diy)bi							
8.083	580449	17.4	3	59	78745	C18H18	234	
1074-55-1	Benzene, 1-methyl-4-propyl-							
8.361	87014	2.60	3	94	14344	C10H14	134	
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-							
8.546	443241	13.3	3	97	14366	C10H14	134	
767-58-8	Indan, 1-methyl-							
8.639	190958	5.71	3	83	13567	C10H12	132	
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-							
8.835	127074	3.80	3	96	14377	C10H14	134	
95-93-2	Benzene, 1,2,4,5-tetramethyl-							
8.927	353764	10.6	3	97	14355	C10H14	134	

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
8.981	527-53-7 Benzene, 1,2,3,5-tetramethyl-	153452	4.59	3	97	14356	C10H14	134
9.232	934-10-1 3-Phenylbut-1-ene	140477	4.20	3	87	13568	C10H12	132
9.384	2039-89-6 Benzene, 2-ethenyl-1,4-dimethyl-	491545	14.7	3	89	13603	C10H12	132

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
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* 1 Fluorobenzene (IS)	3.451	844325	25.0
* 3 1,4-Dichlorobenzene-d4	7.822	836136	25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

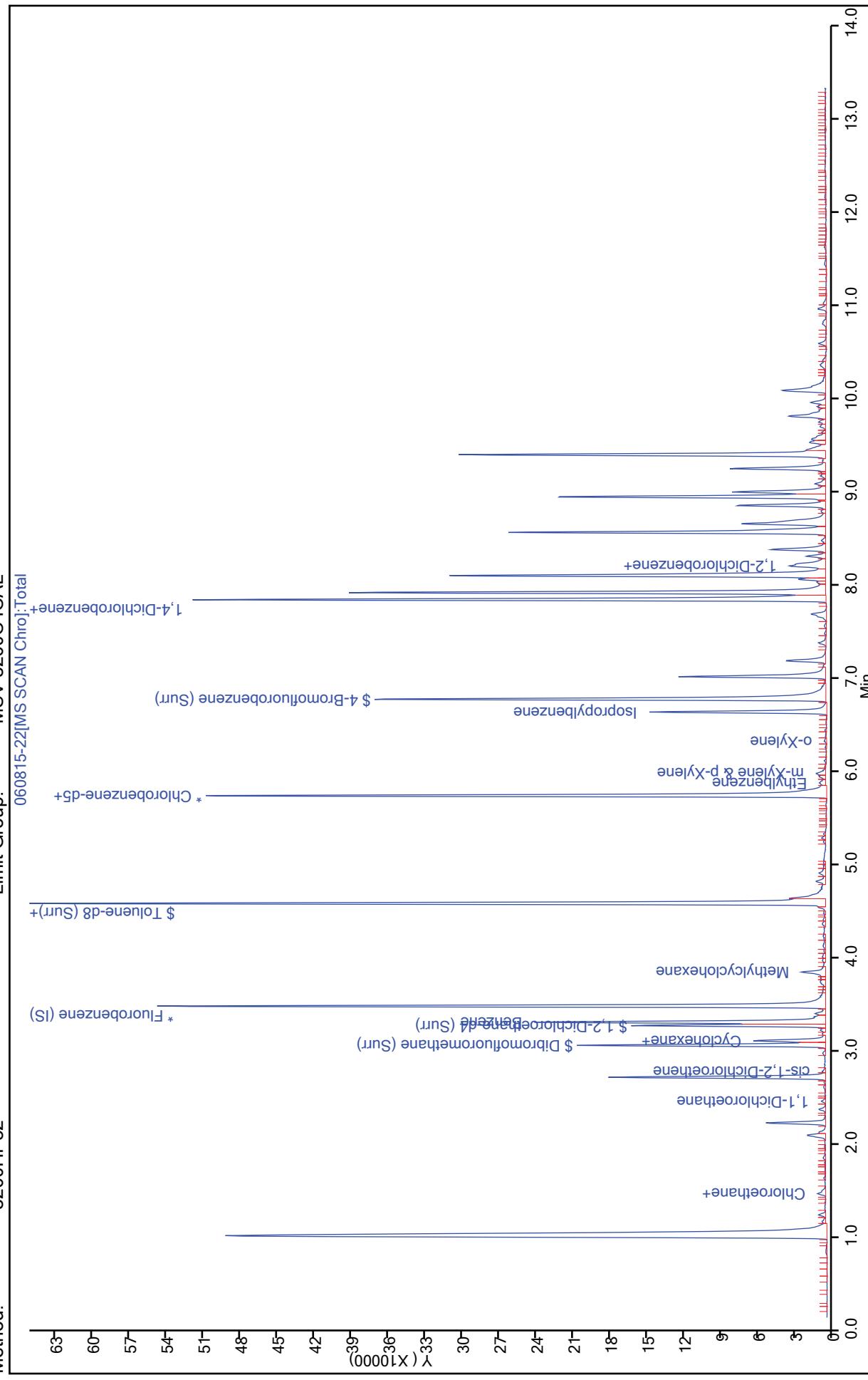
Run Reagent

Report Date: 10-Jun-2015 11:21:49

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
Injection Date: 08-Jun-2015 20:05:30  
Lims ID: 490-79645-A-8  
Client ID: RW-6A-060115  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 20  
ALS Bottle#: 22  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

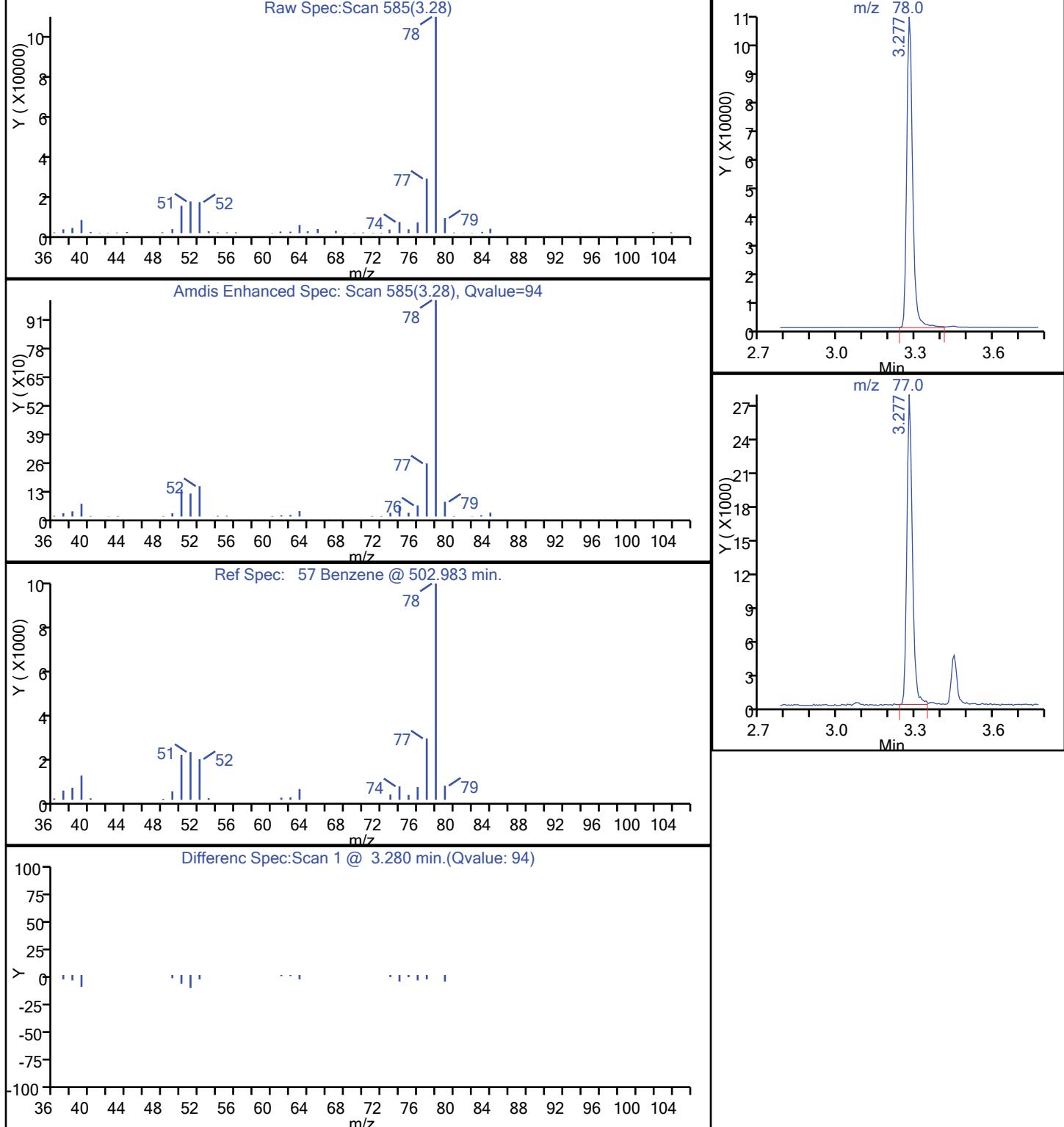
Purge Vol: 10.000 mL

Limit Group:

Method: 8260HP32

MSV 8260C ICAL

Column: MS SCAN

**57 Benzene, CAS: 71-43-2**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

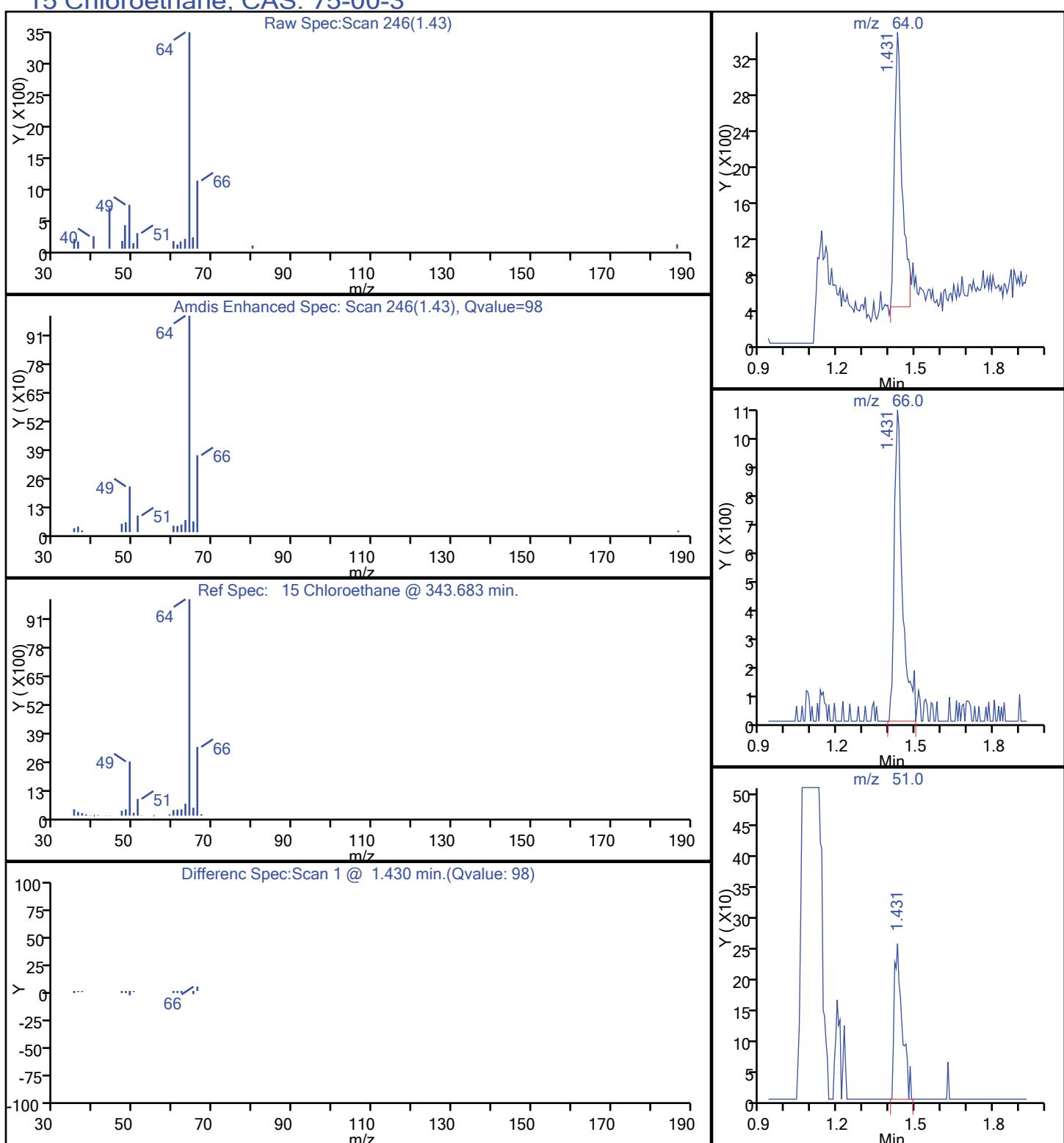
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**15 Chloroethane, CAS: 75-00-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

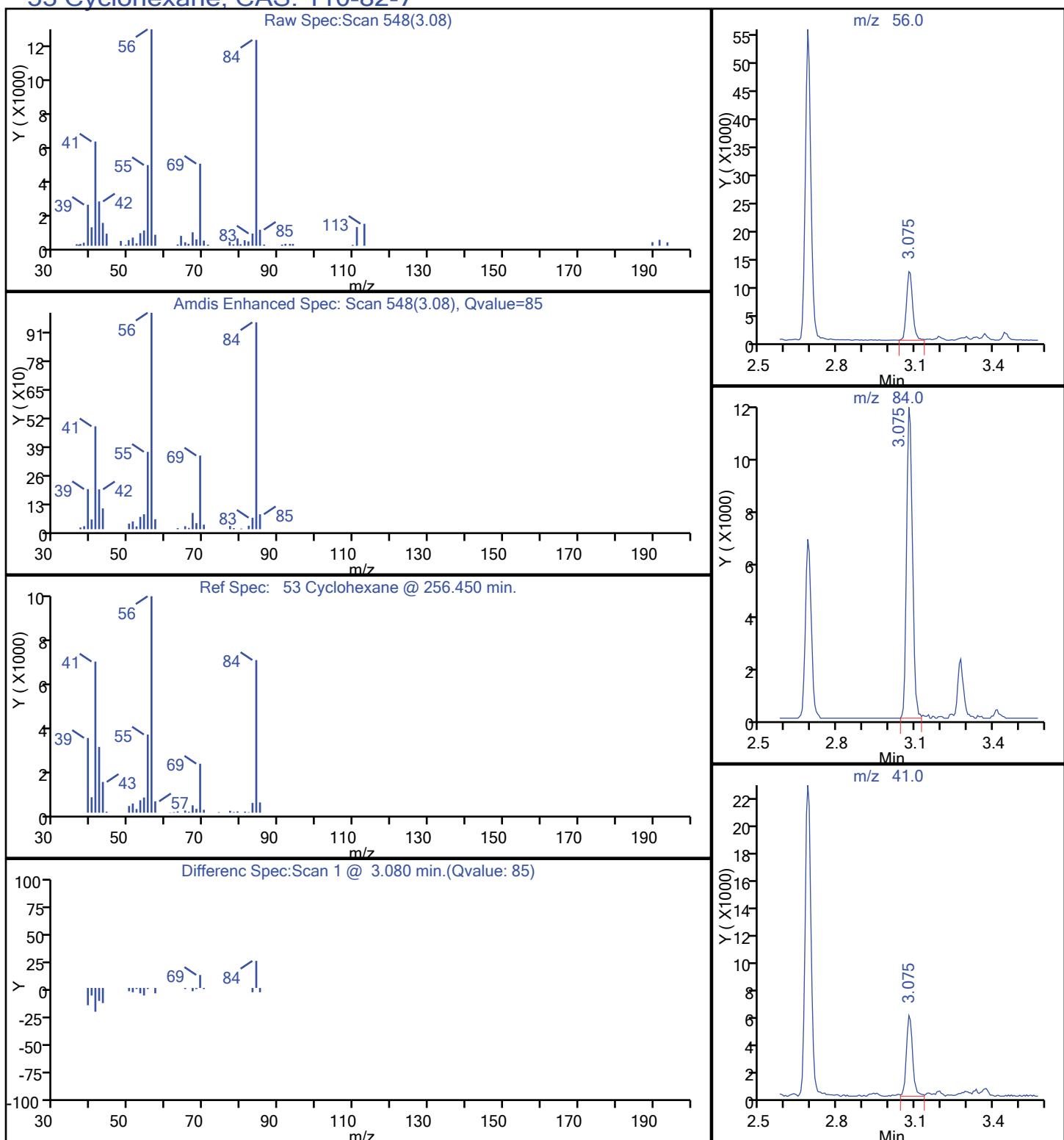
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**53 Cyclohexane, CAS: 110-82-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

Purge Vol: 10.000 mL

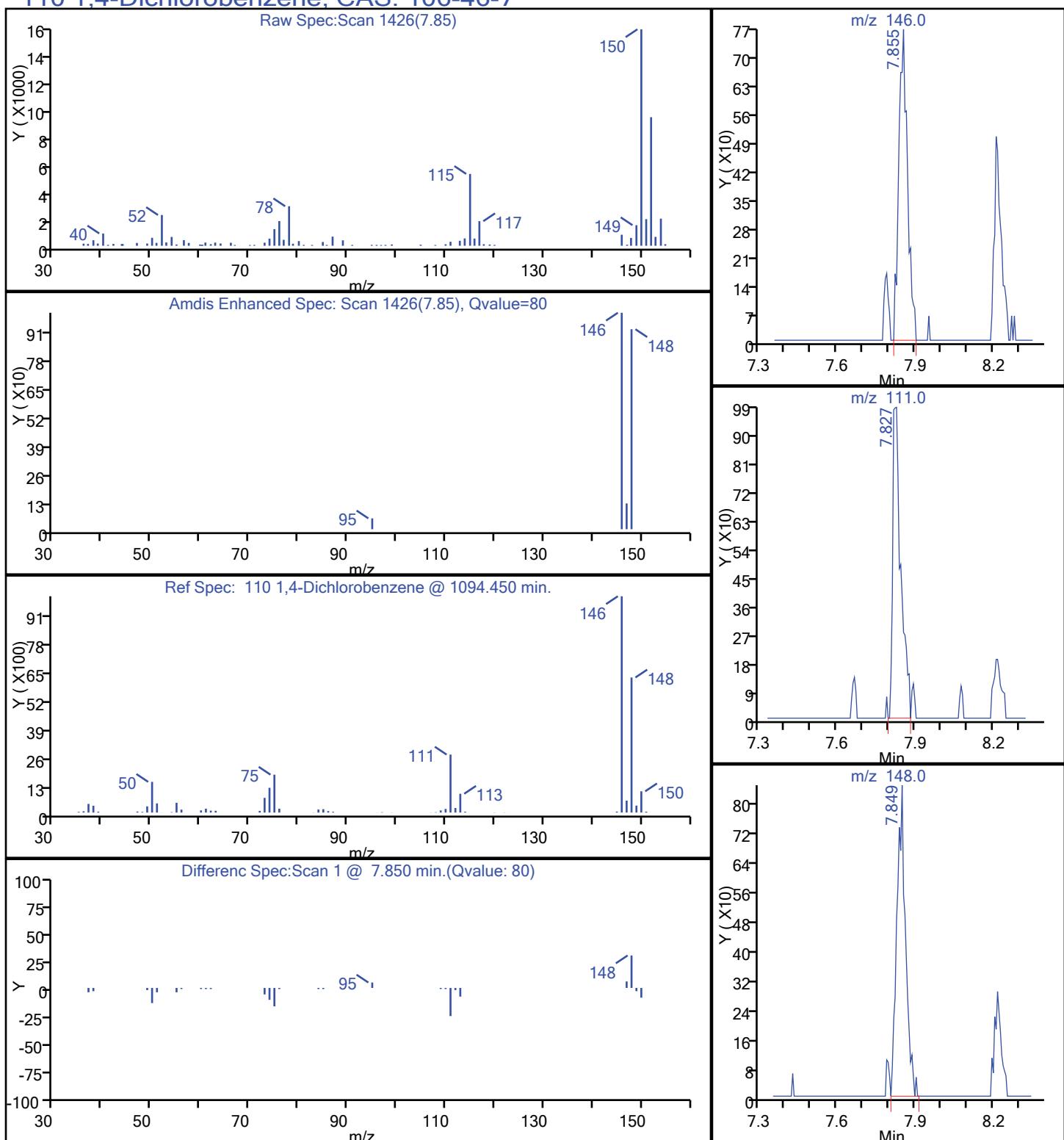
Limit Group:

Method: 8260HP32

MSV 8260C ICAL

Column:

Detector MS SCAN

**110 1,4-Dichlorobenzene, CAS: 106-46-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

Purge Vol: 10.000 mL

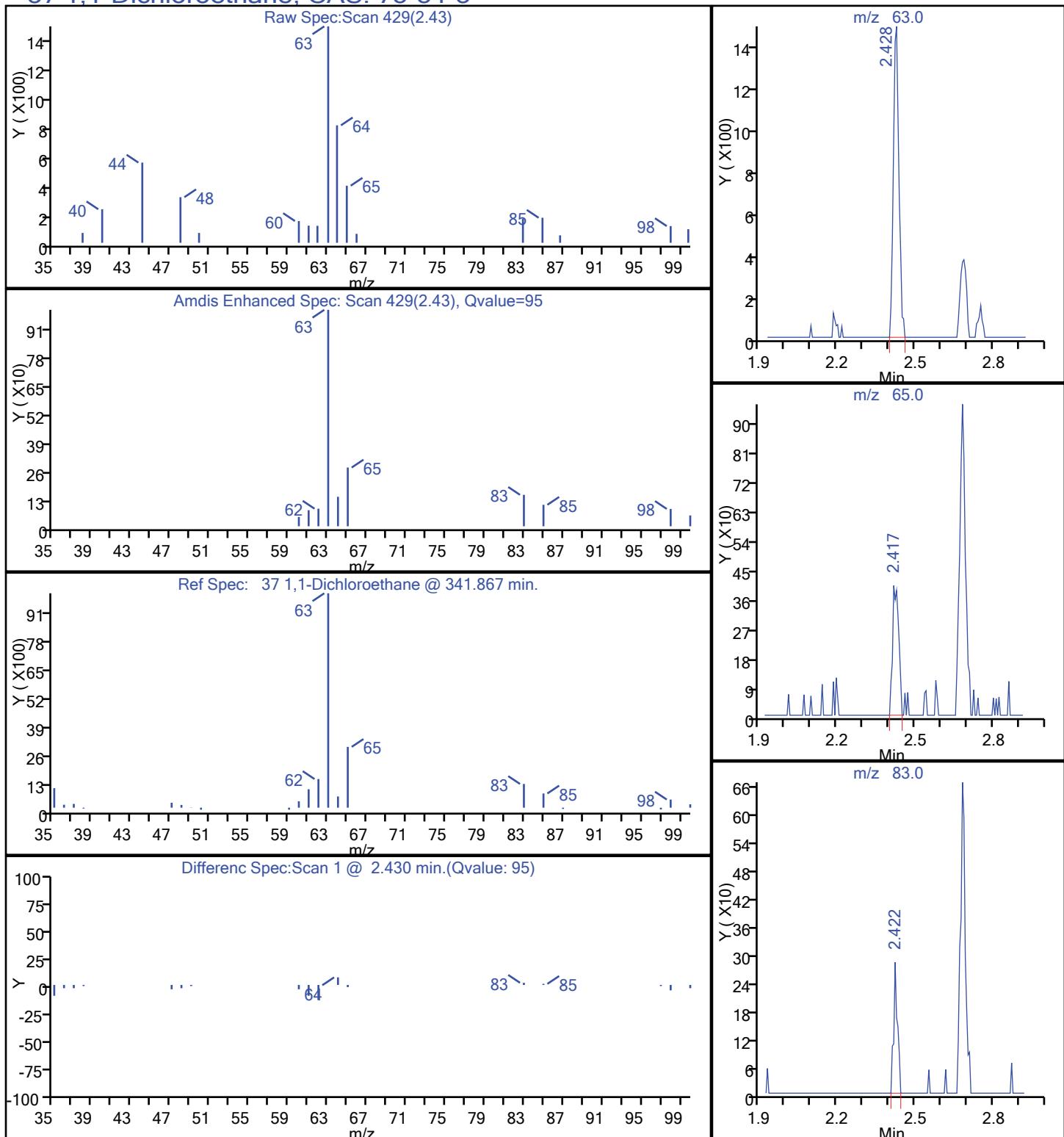
Limit Group:

Method: 8260HP32

MSV 8260C ICAL

Column: Detector

MS SCAN

**37 1,1-Dichloroethane, CAS: 75-34-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

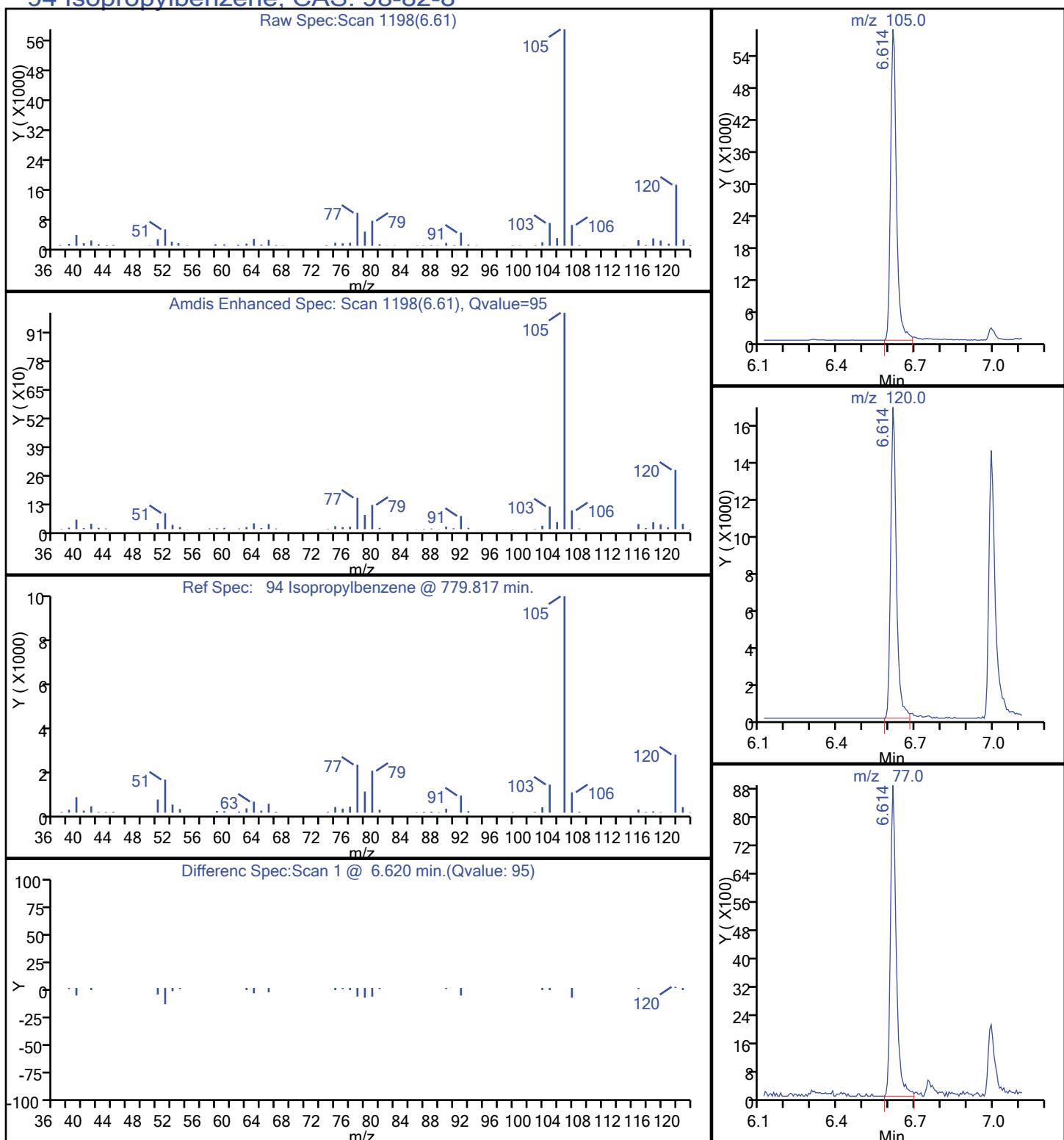
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**94 Isopropylbenzene, CAS: 98-82-8**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

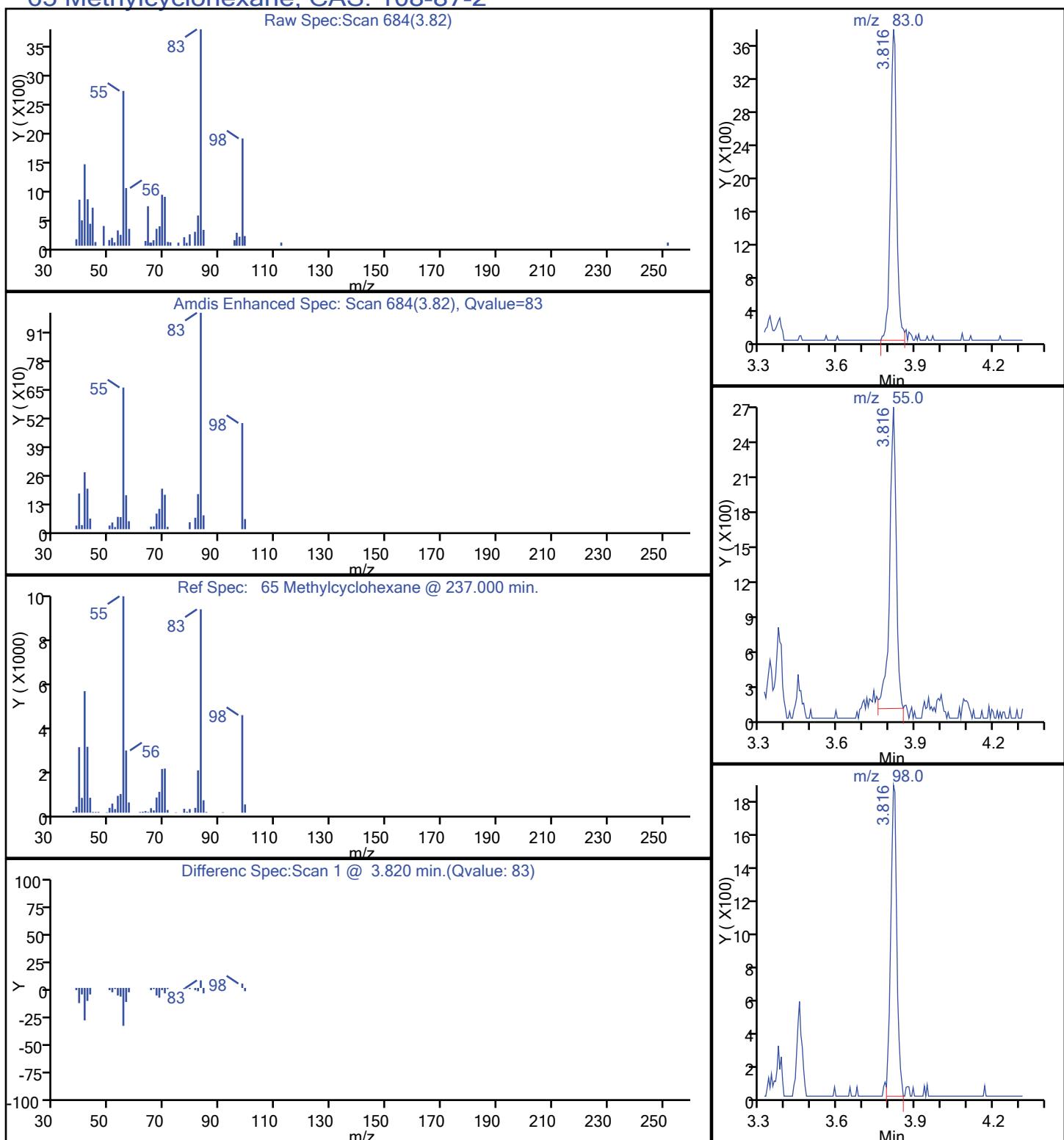
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**65 Methylcyclohexane, CAS: 108-87-2**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

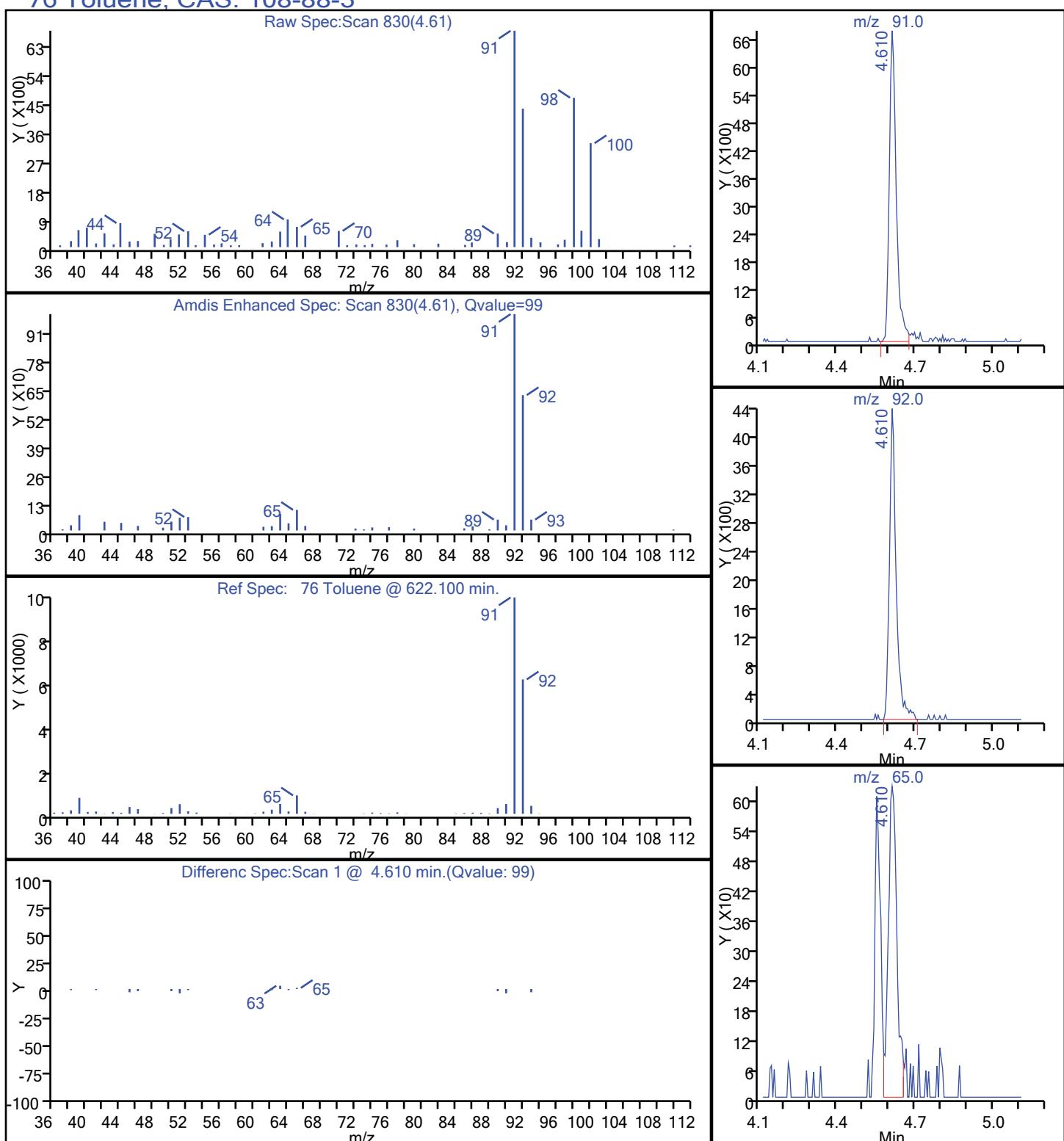
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**76 Toluene, CAS: 108-88-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

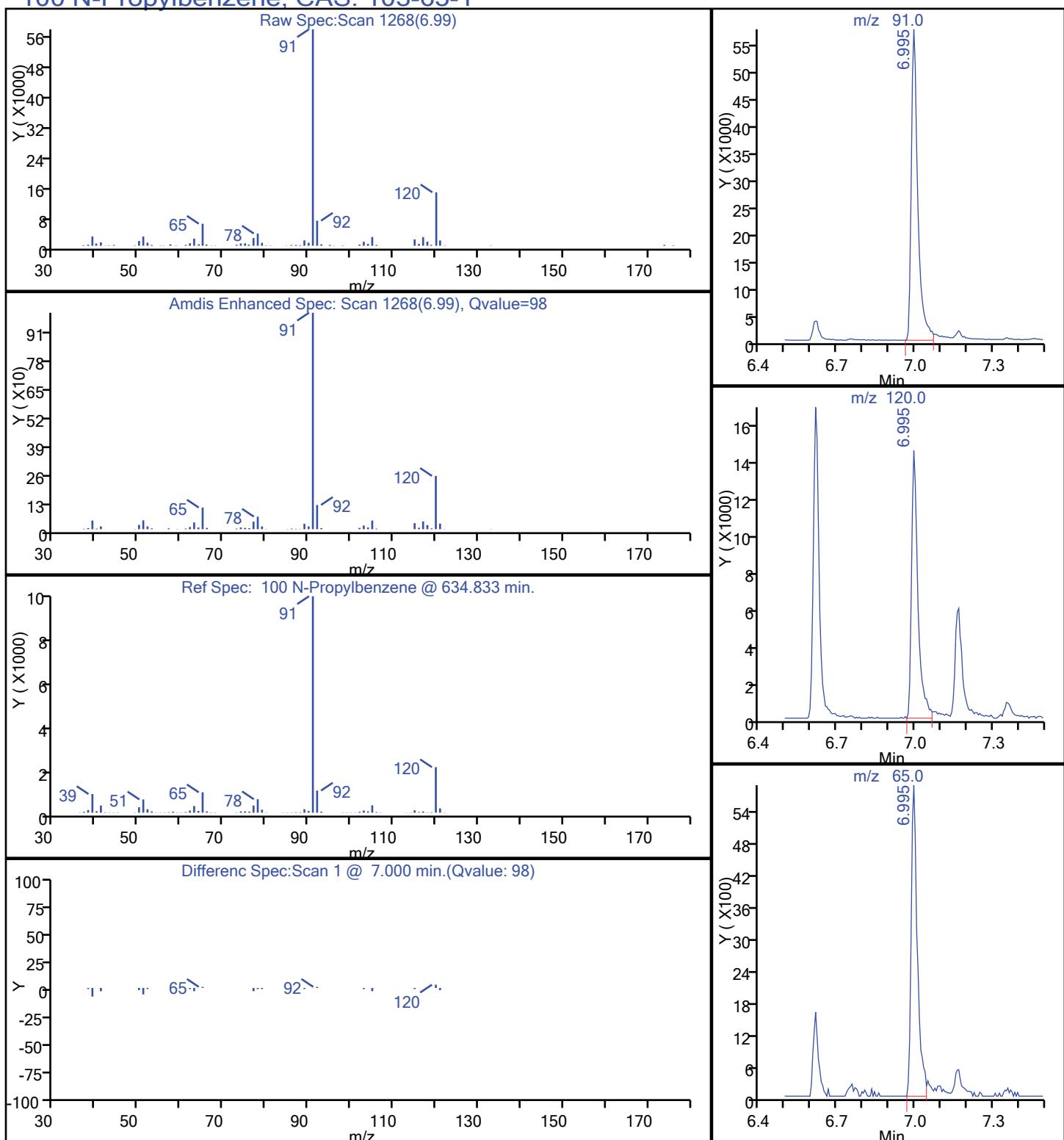
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

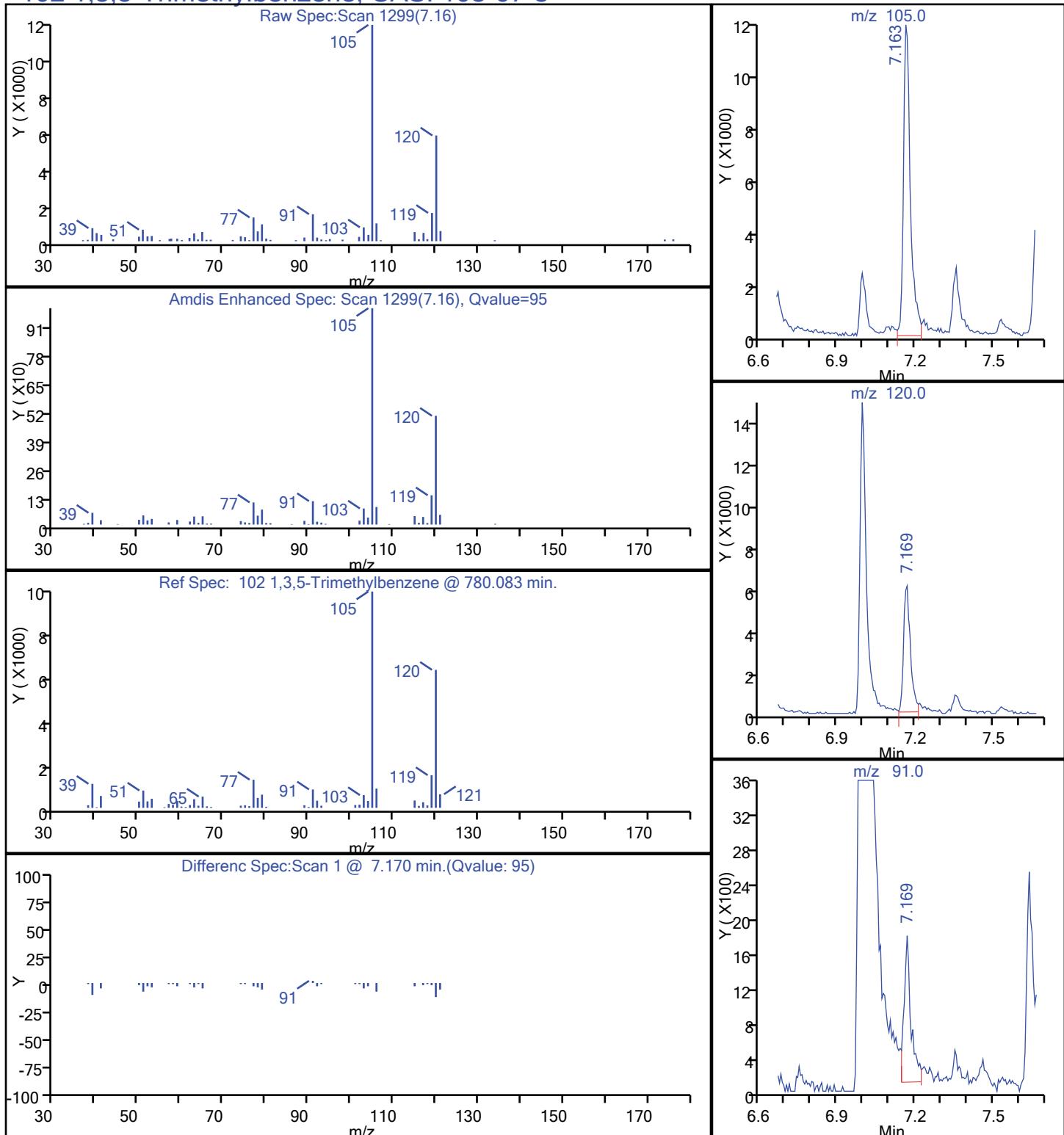
Column:

**100 N-Propylbenzene, CAS: 103-65-1**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 102 1,3,5-Trimethylbenzene, CAS: 108-67-8



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

ALS Bottle#: 22 Worklist Smp#: 20

Operator ID: EML

Dil. Factor: 1.0000

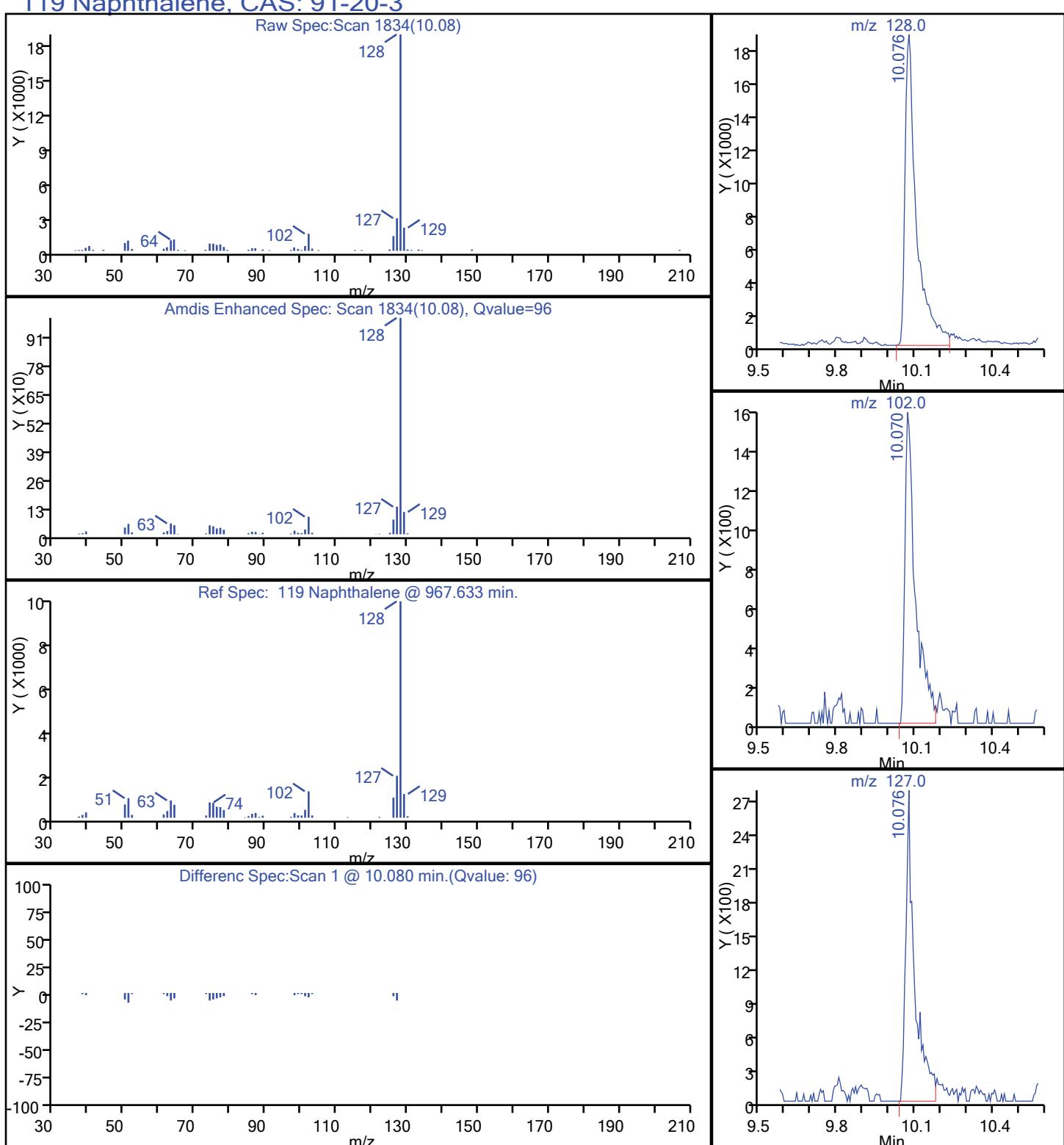
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

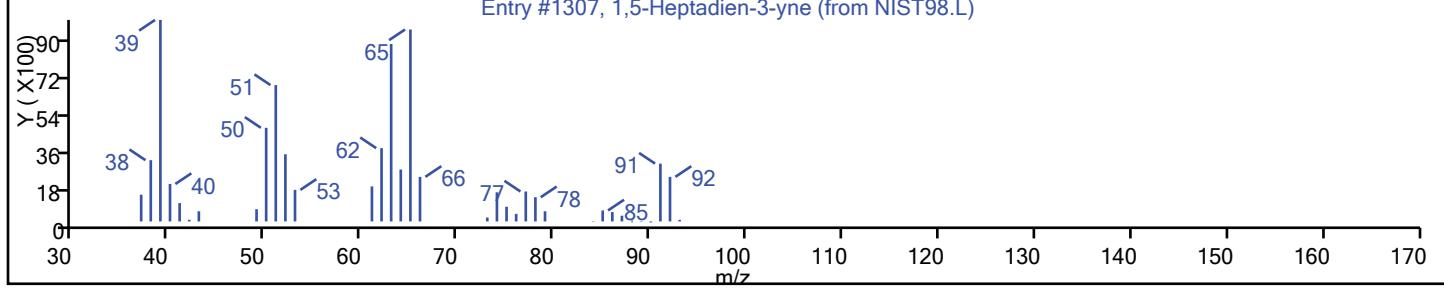
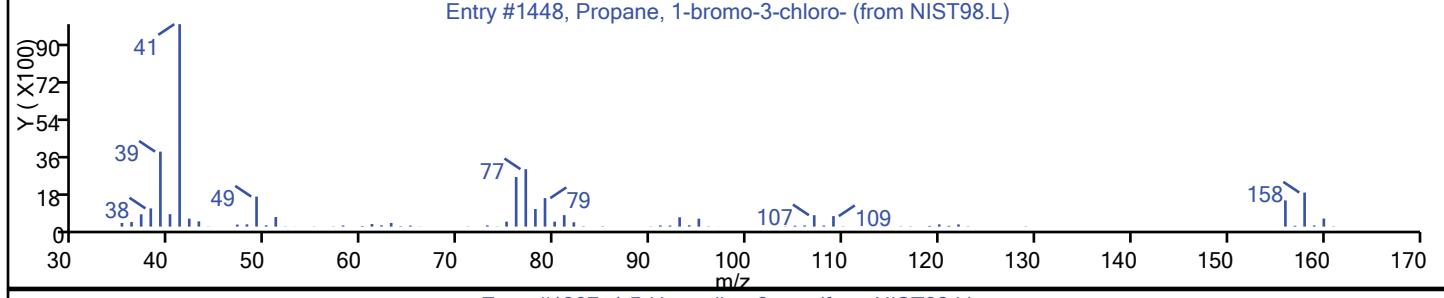
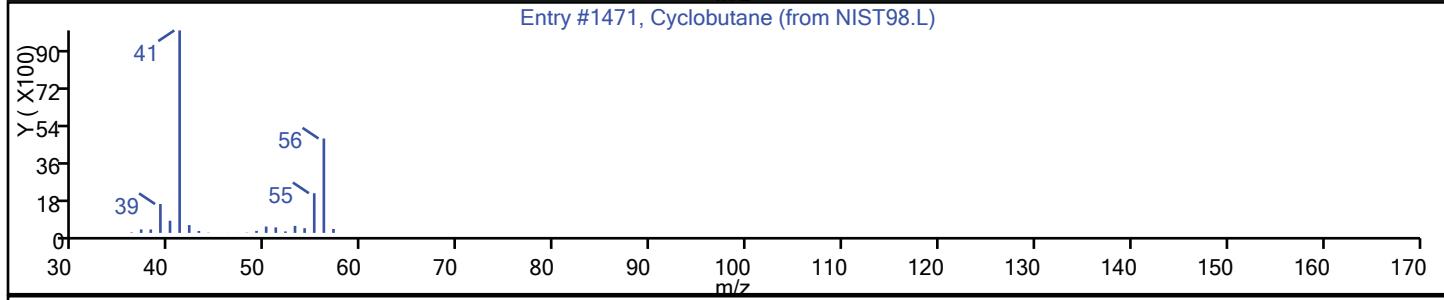
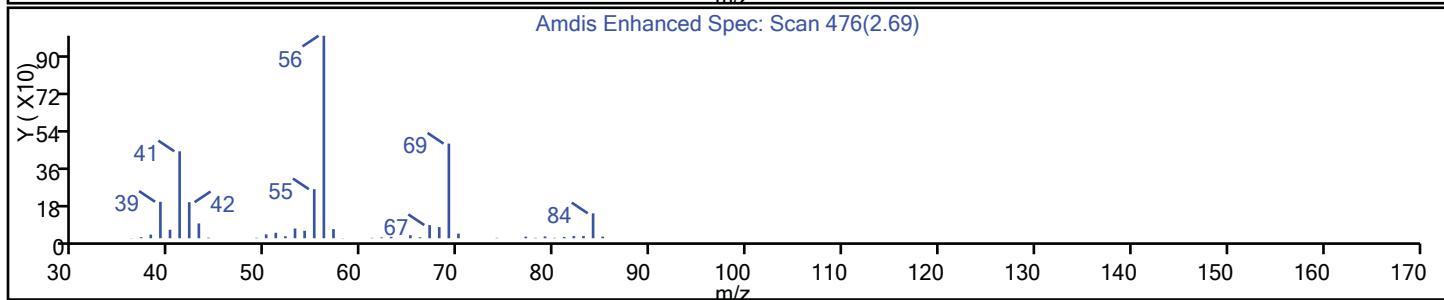
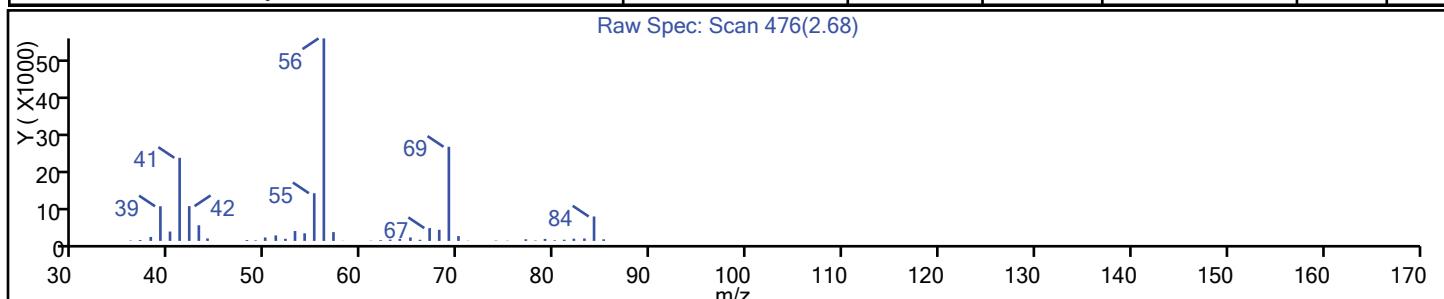
Column:

**119 Naphthalene, CAS: 91-20-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Cyclopentane, methyl-	96-37-7	NIST98	1471	C6H12	84	94
Cyclobutane, ethyl-	4806-61-5	NIST98.L	1448	C6H12	84	72
1H-Tetrazole, 5-methyl-	4076-36-2	NIST98.L	1307	C2H4N4	84	72



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D

Injection Date: 08-Jun-2015 20:05:30

Instrument ID: HP32

Lims ID: 490-79645-A-8

Lab Sample ID: 490-79645-8

Client ID: RW-6A-060115

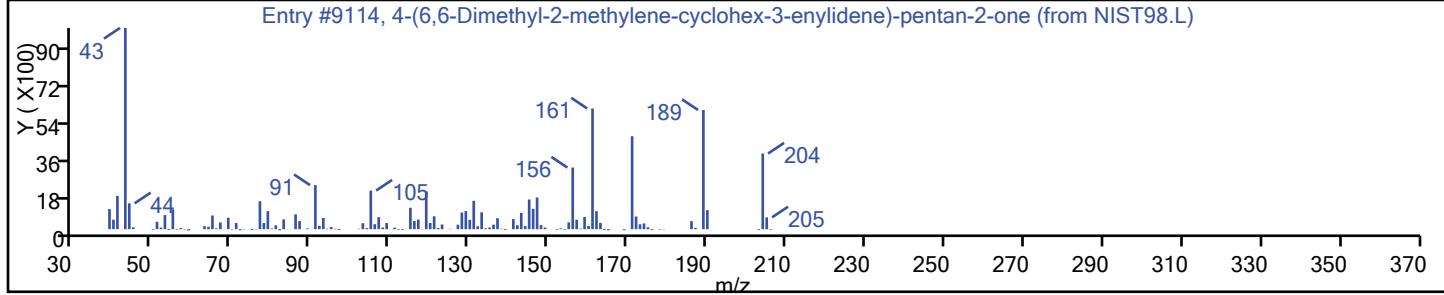
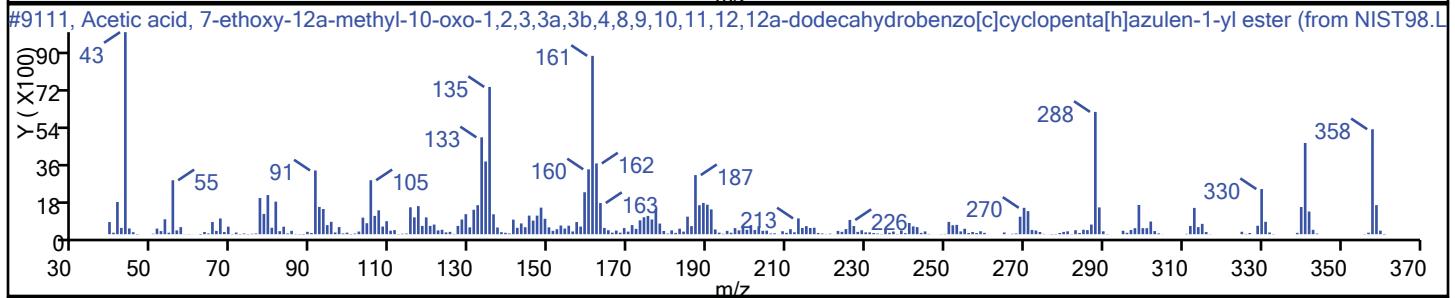
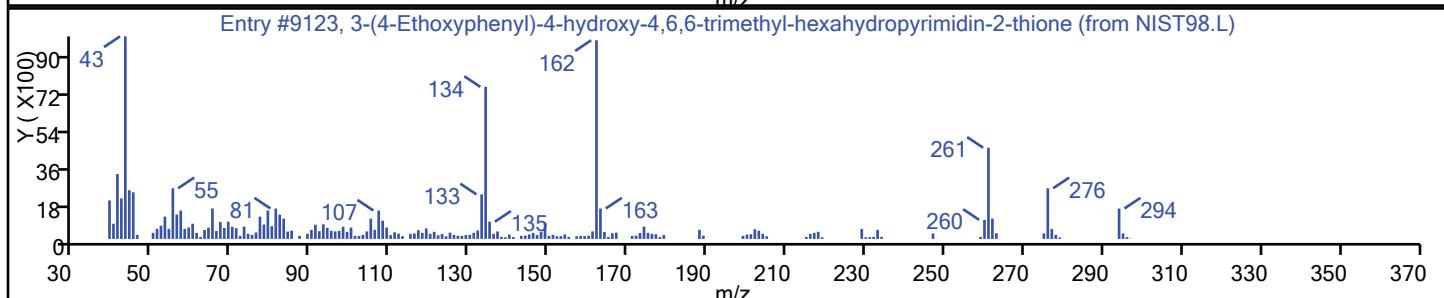
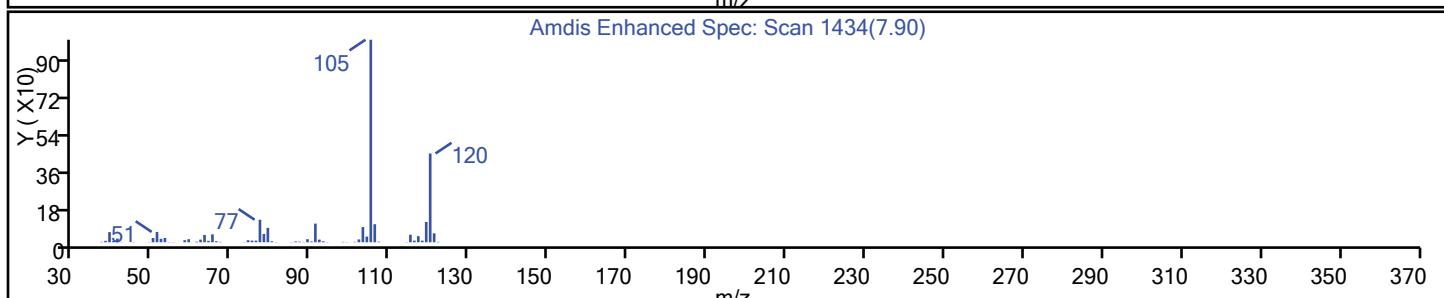
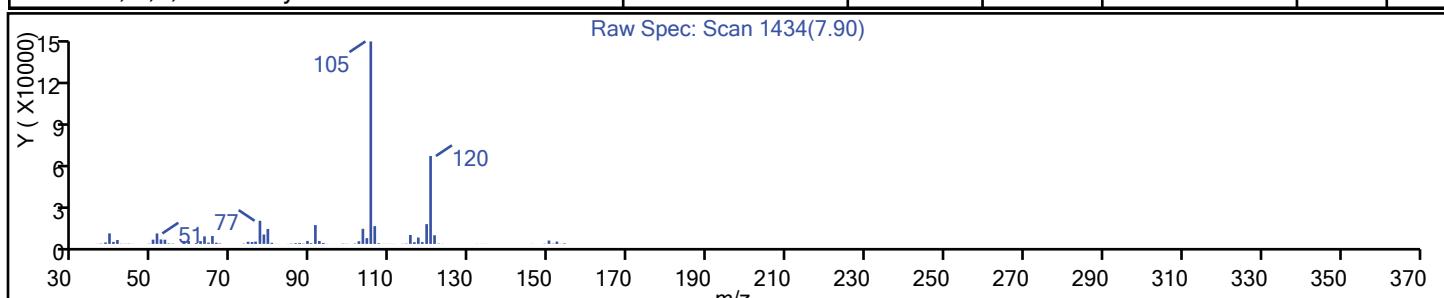
Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20

Purge Vol: 10.000 mL Dil. Factor: 1.0000

Method: 8260HP32 Limit Group: MSV 8260C ICAL

Column: Detector MS SCAN

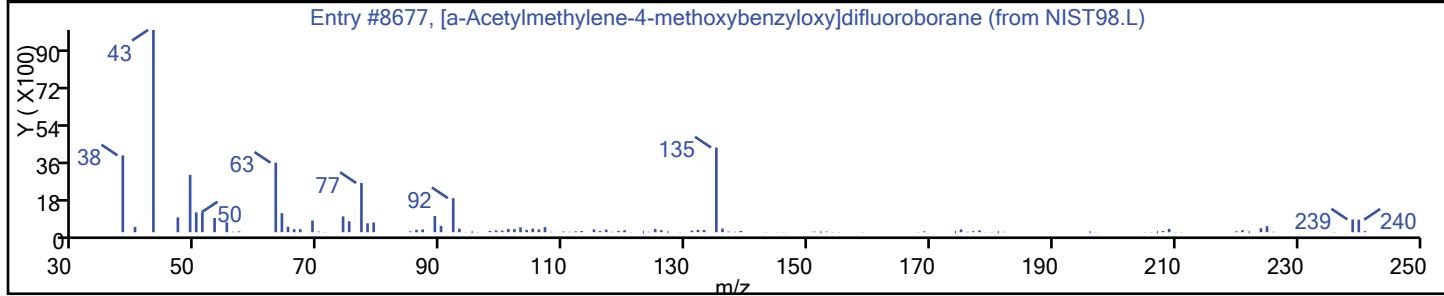
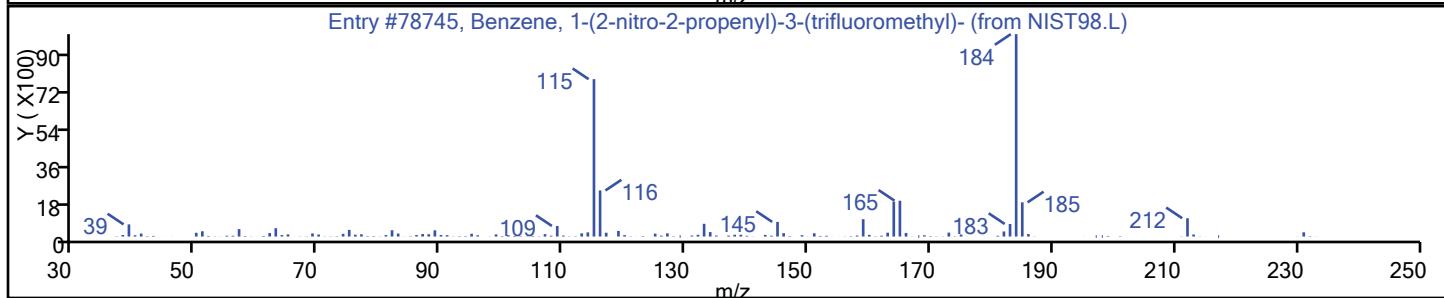
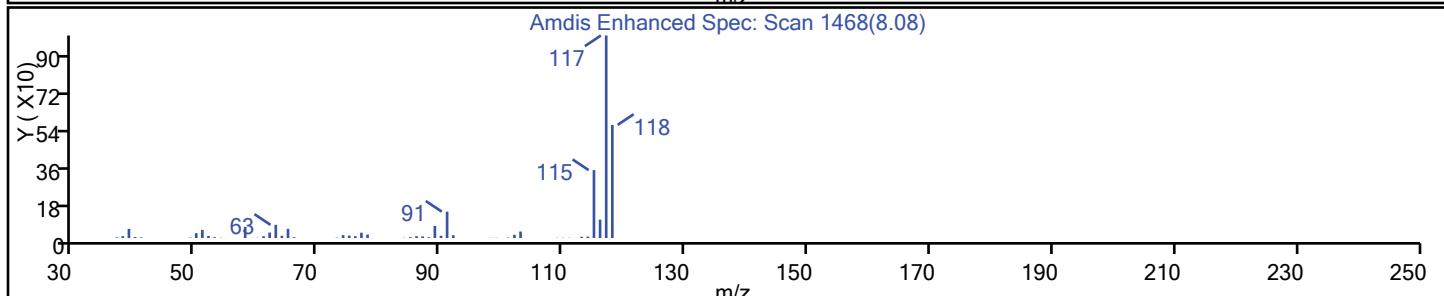
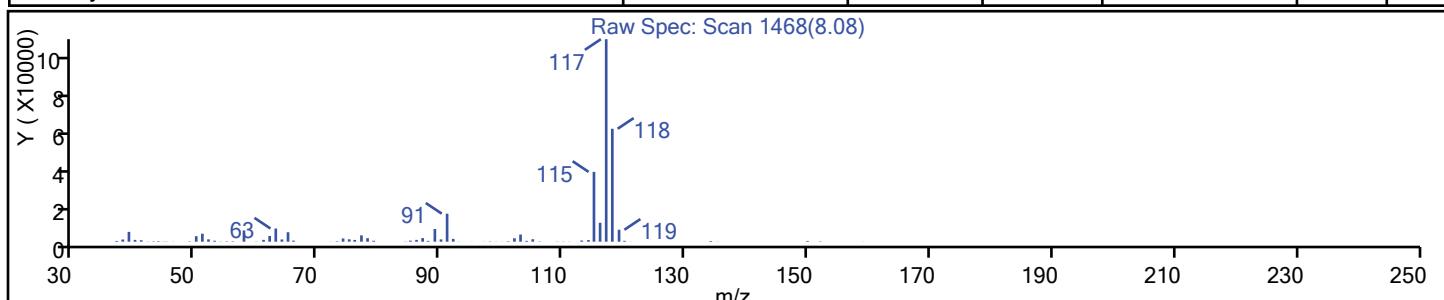
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,3-trimethyl-	526-73-8	NIST98	9123	C9H12	120	95
Benzene, 1,2,4-trimethyl-	95-63-6	NIST98.L	9111	C9H12	120	94
Benzene, 1,3,5-trimethyl-	108-67-8	NIST98.L	9114	C9H12	120	91



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

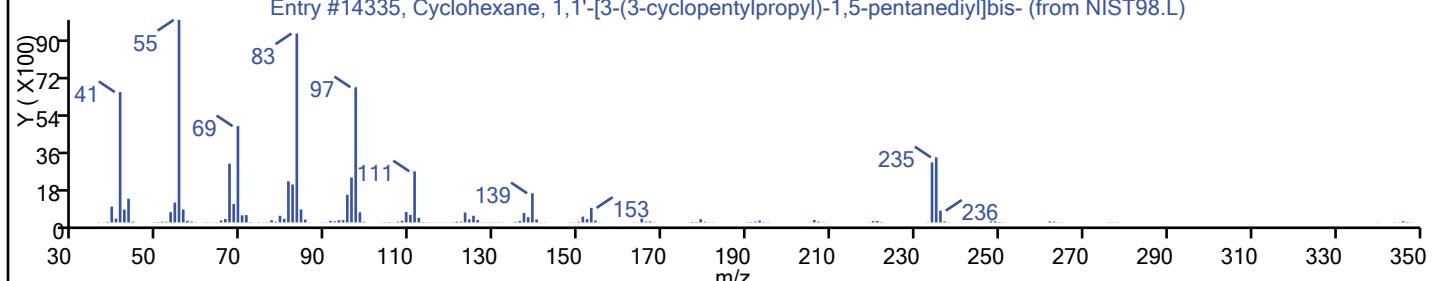
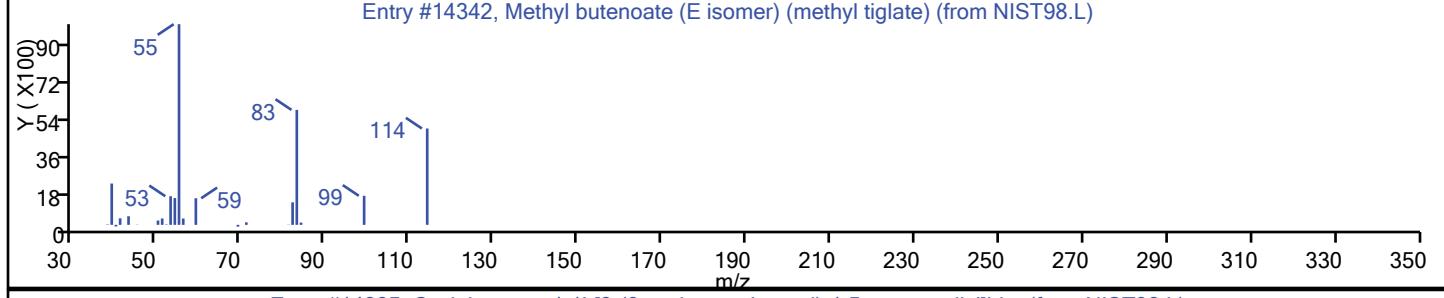
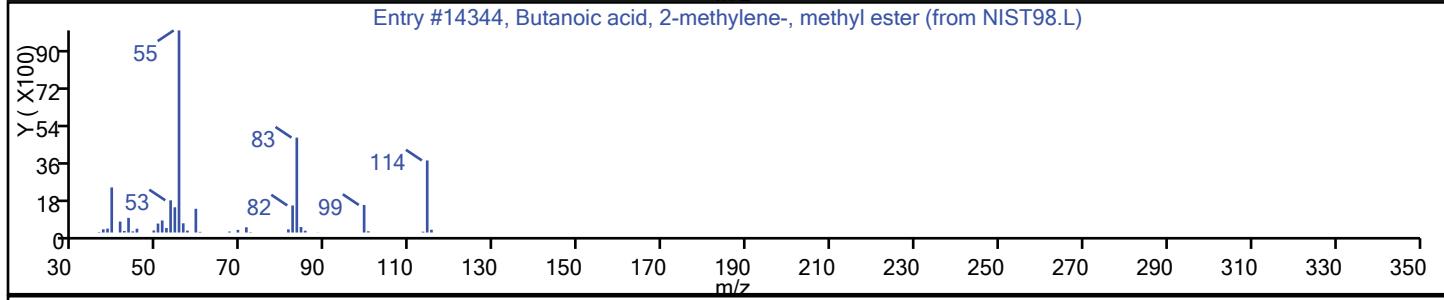
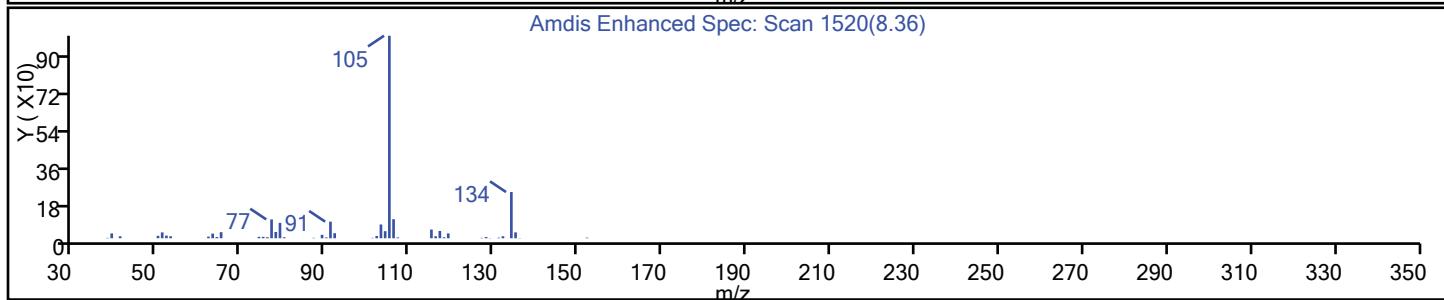
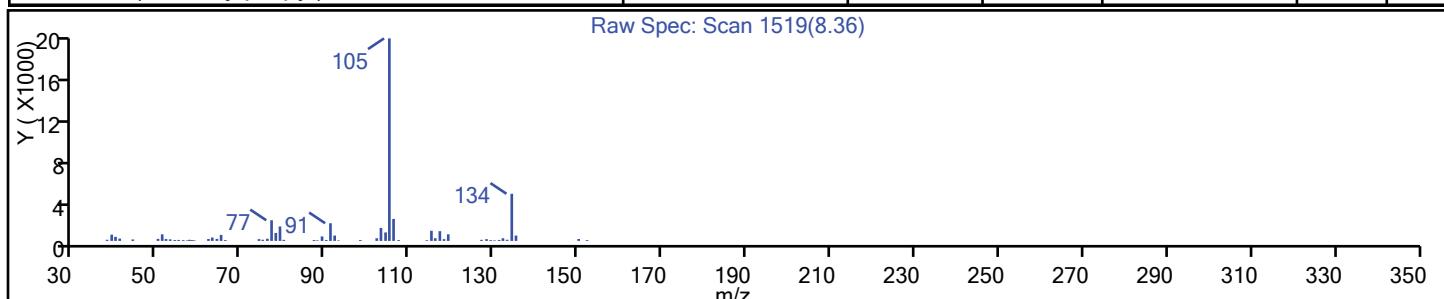
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,1'-(1,5-hexadiene-1,6-diy)bi	4439-45-6	NIST98	78745	C18H18	234	59
Deltacyclene	7785-10-6	NIST98.L	8677	C9H10	118	59



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

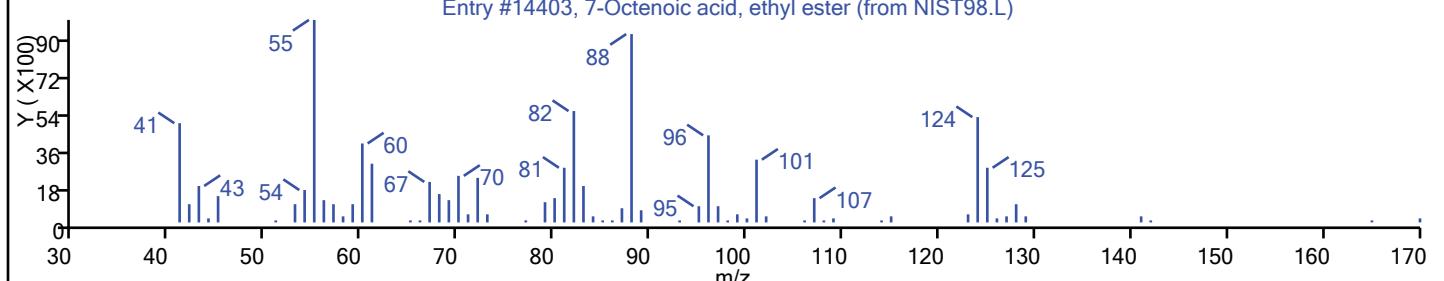
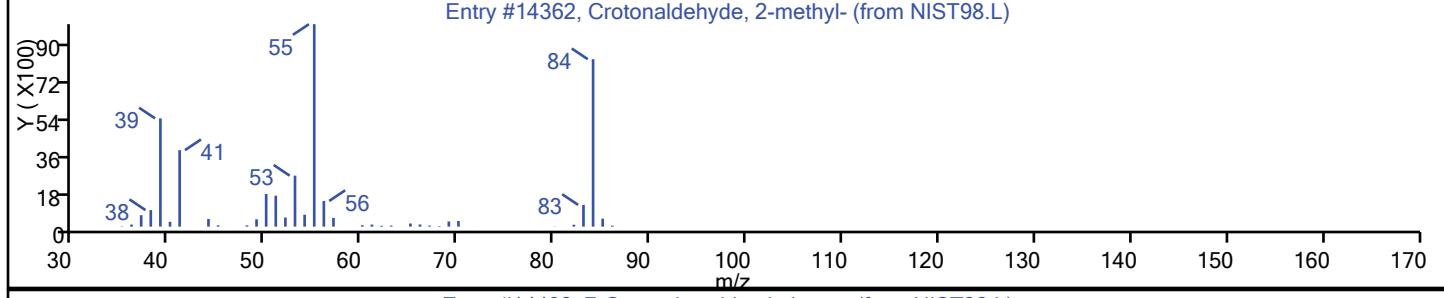
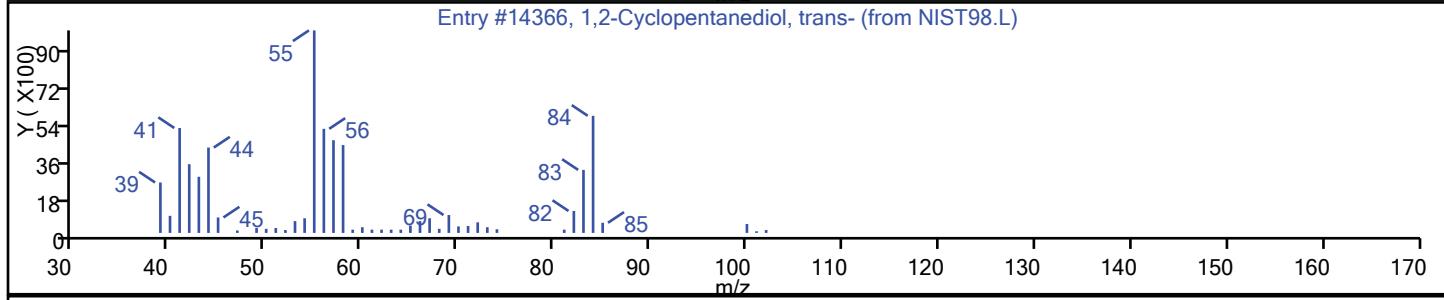
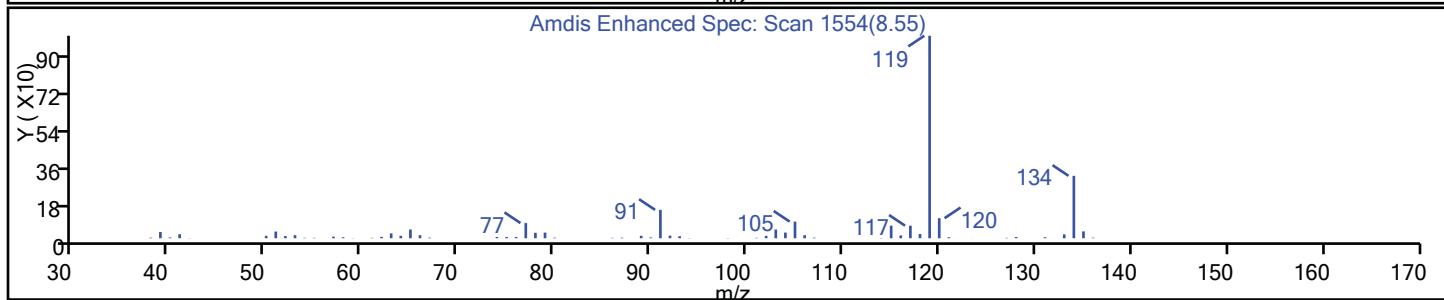
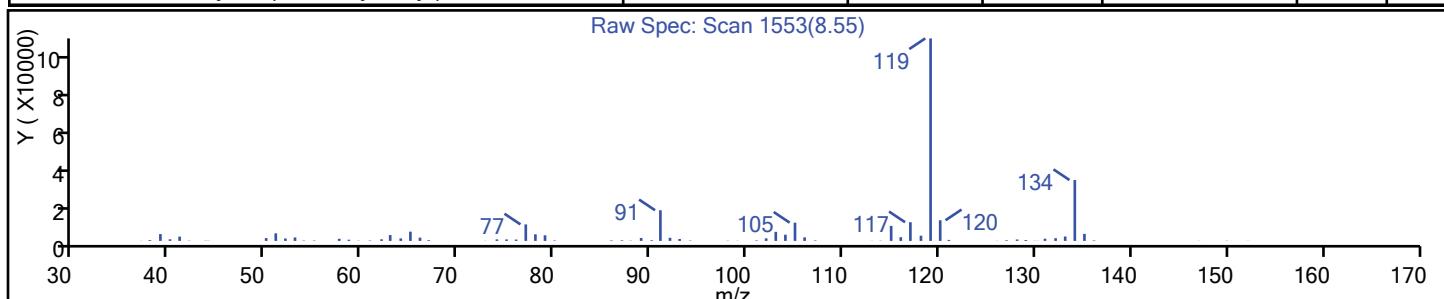
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-methyl-4-propyl-	1074-55-1	NIST98	14344	C10H14	134	94
Benzene, 1-methyl-2-propyl-	1074-17-5	NIST98.L	14342	C10H14	134	91
Benzene, (1-methylpropyl)-	135-98-8	NIST98.L	14335	C10H14	134	91



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

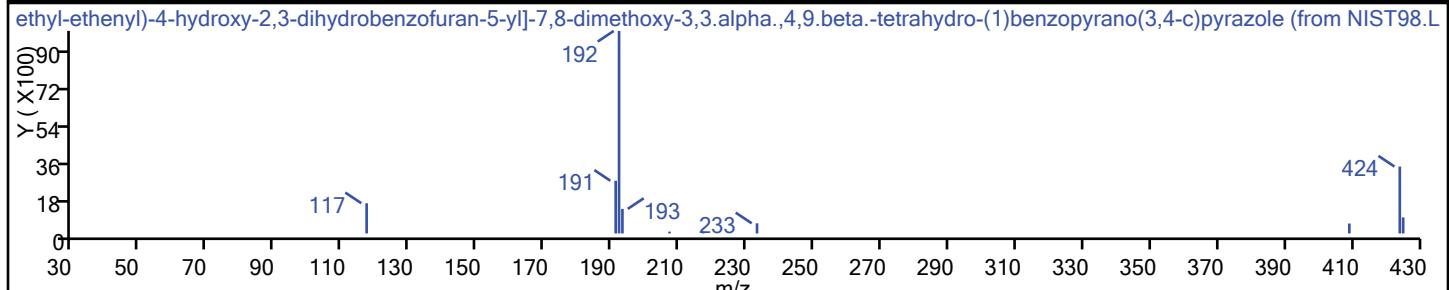
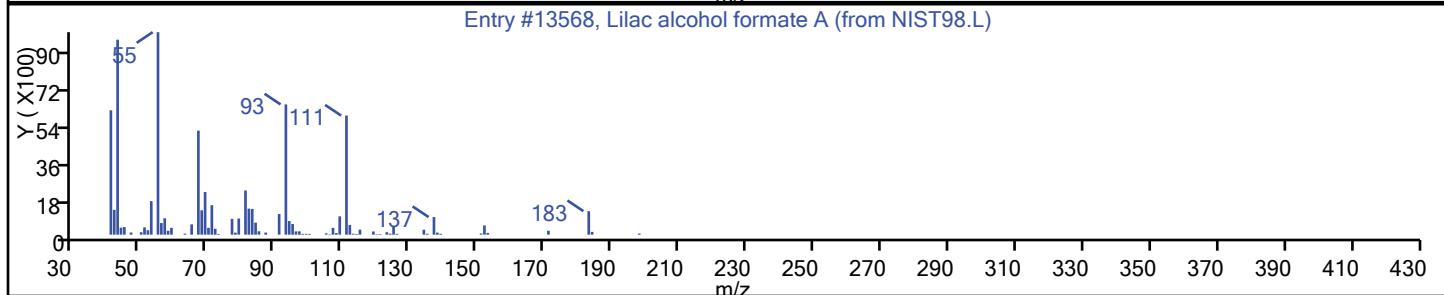
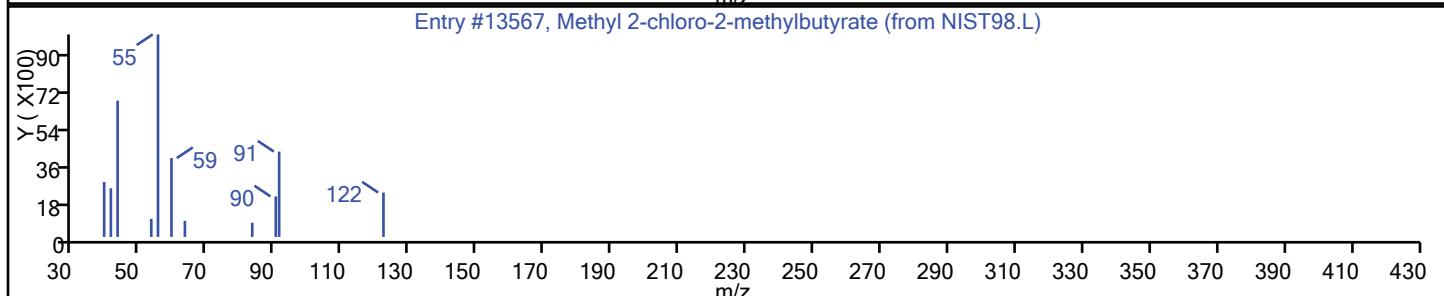
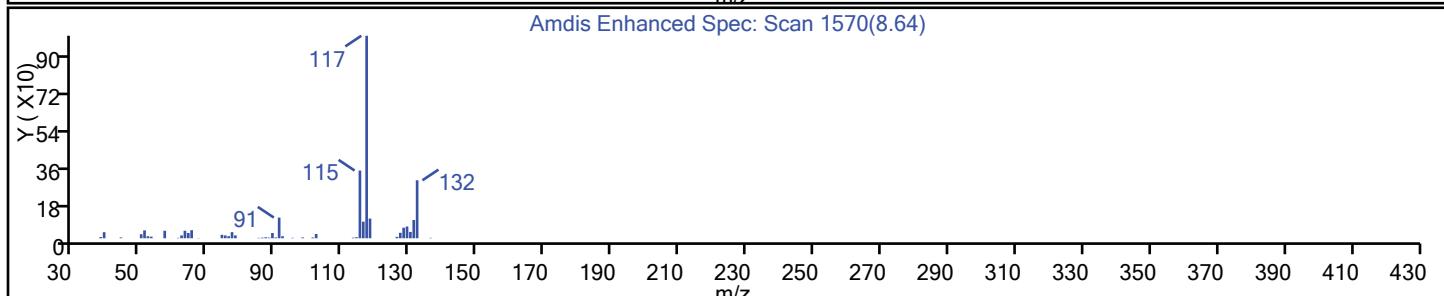
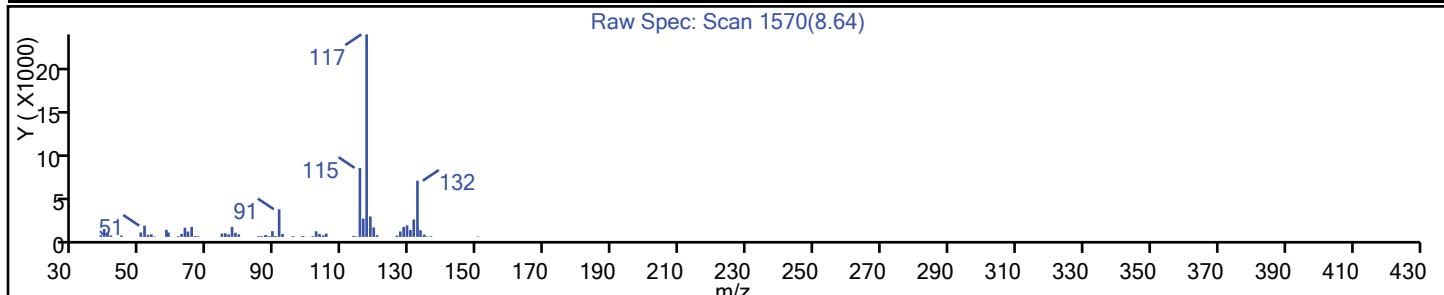
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98	14366	C10H14	134	97
Benzene, 2-ethyl-1,3-dimethyl-	2870-04-4	NIST98.L	14362	C10H14	134	95
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST98.L	14403	C10H14	134	94



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

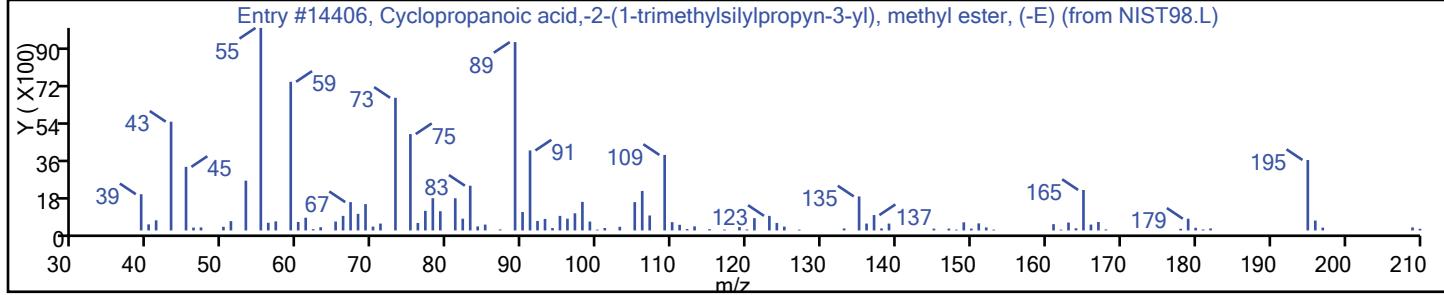
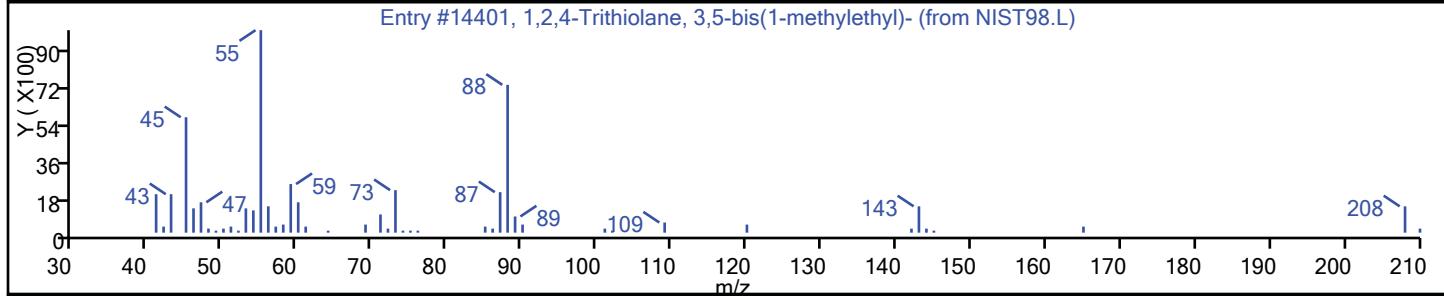
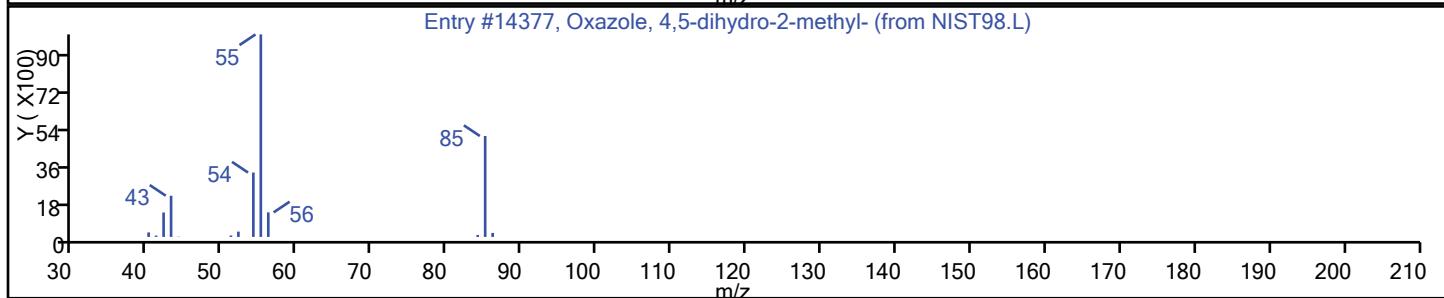
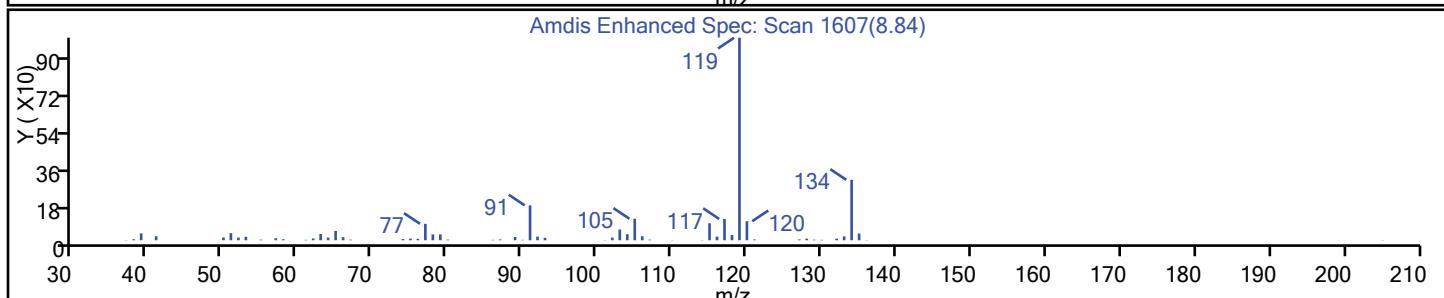
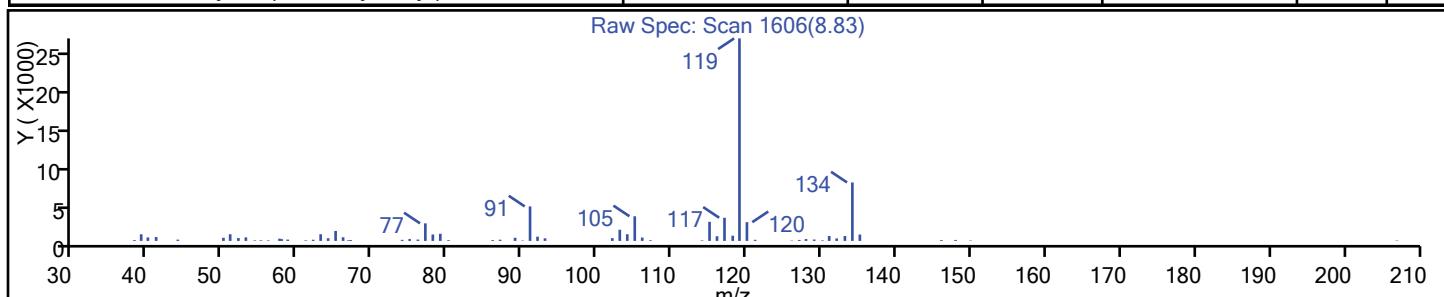
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Indan, 1-methyl-	767-58-8	NIST98	13567	C10H12	132	83
3-Phenylbut-1-ene	934-10-1	NIST98.L	13568	C10H12	132	64
Benzaldehyde, 4-(1-phenyl-2-propenyl)oxy)	1000277-56-1	NIST98.L	81154	C16H14O2	238	53



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

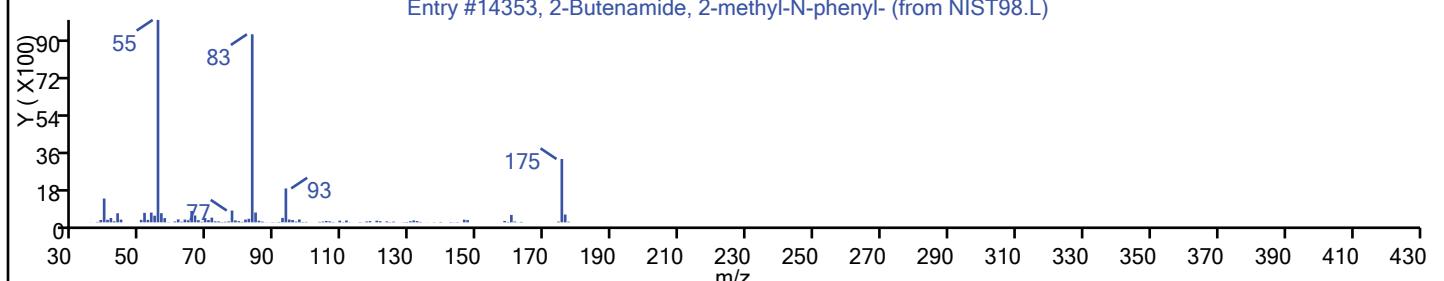
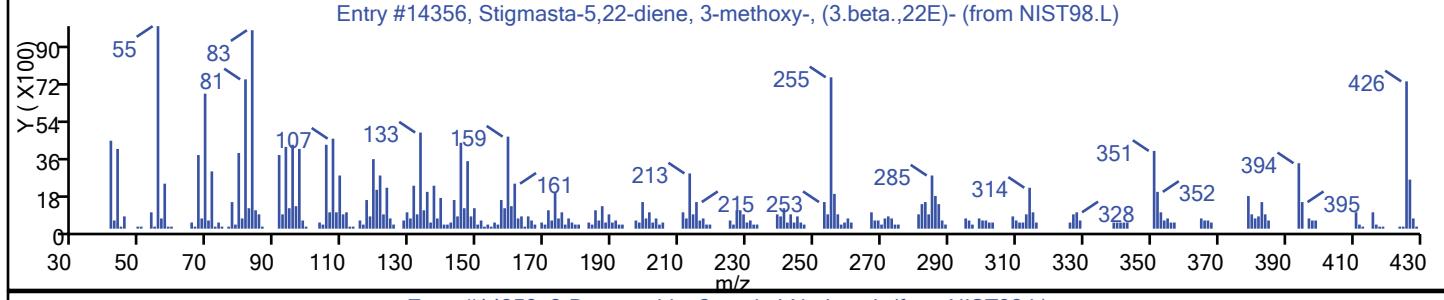
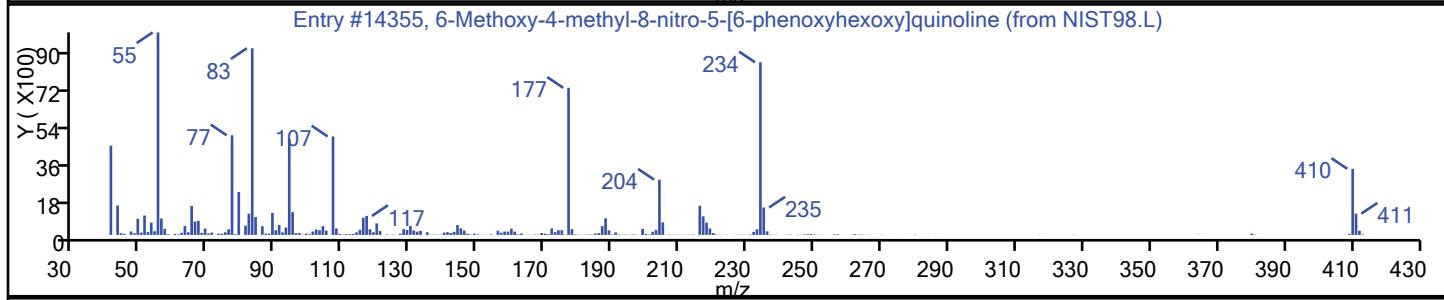
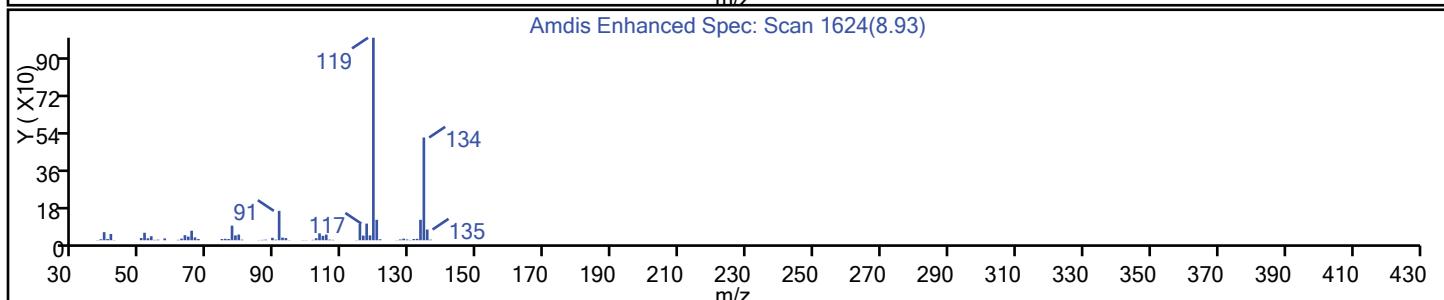
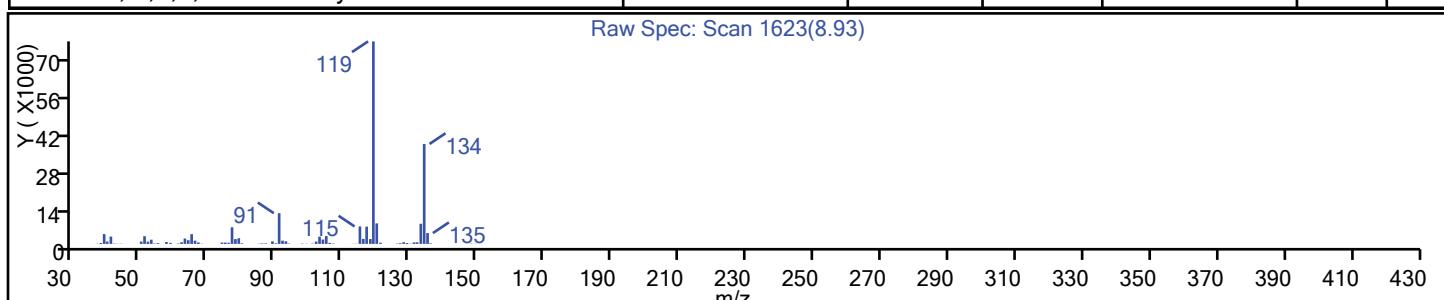
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NIST98	14377	C10H14	134	96
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NIST98.L	14401	C10H14	134	95
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST98.L	14406	C10H14	134	95



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

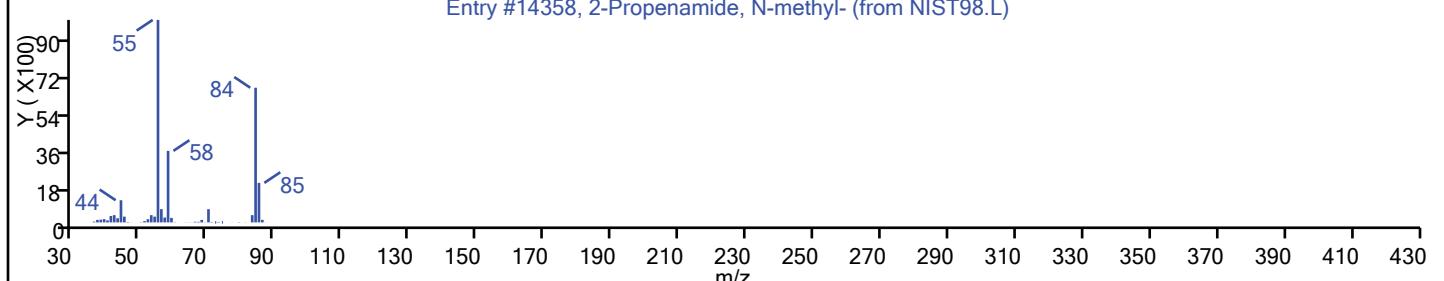
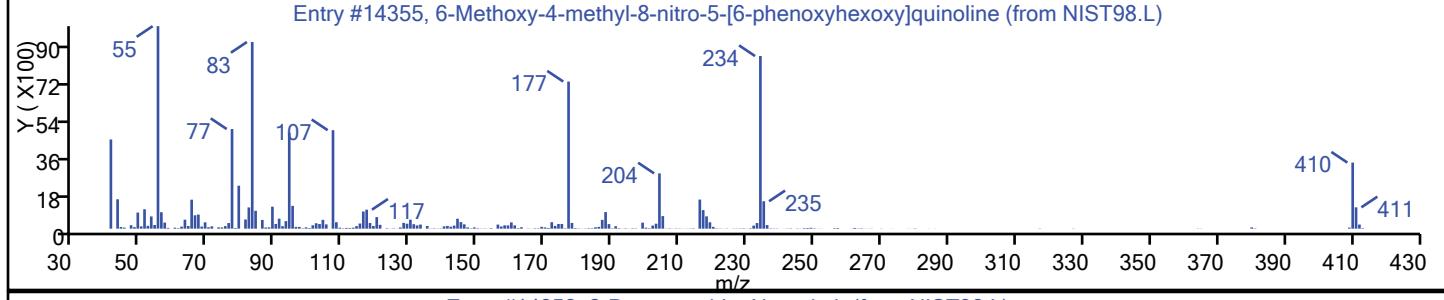
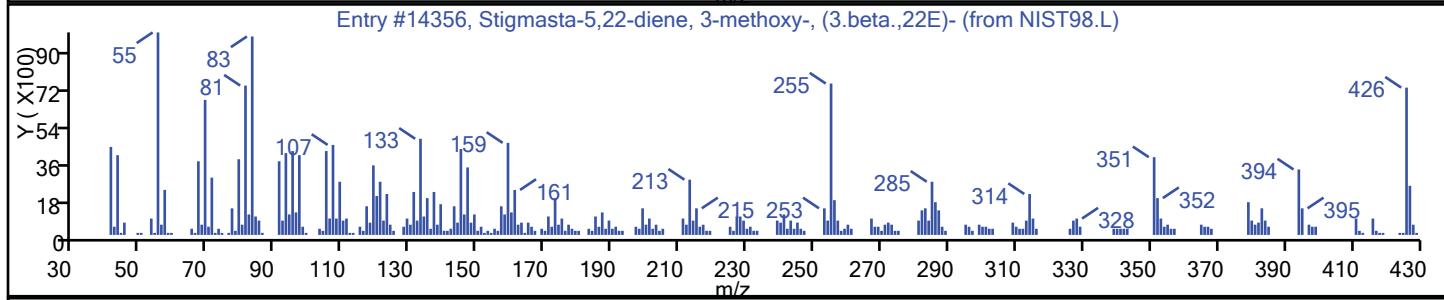
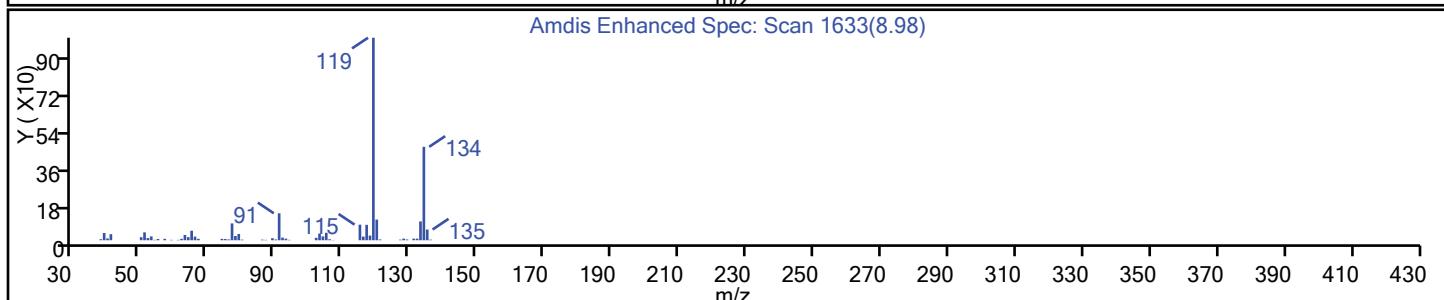
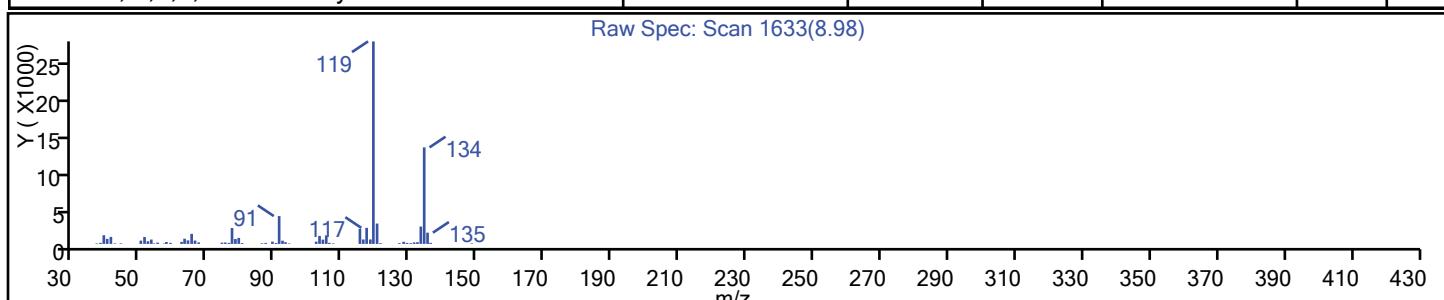
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98	14355	C10H14	134	97
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98.L	14356	C10H14	134	97
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98.L	14353	C10H14	134	96



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

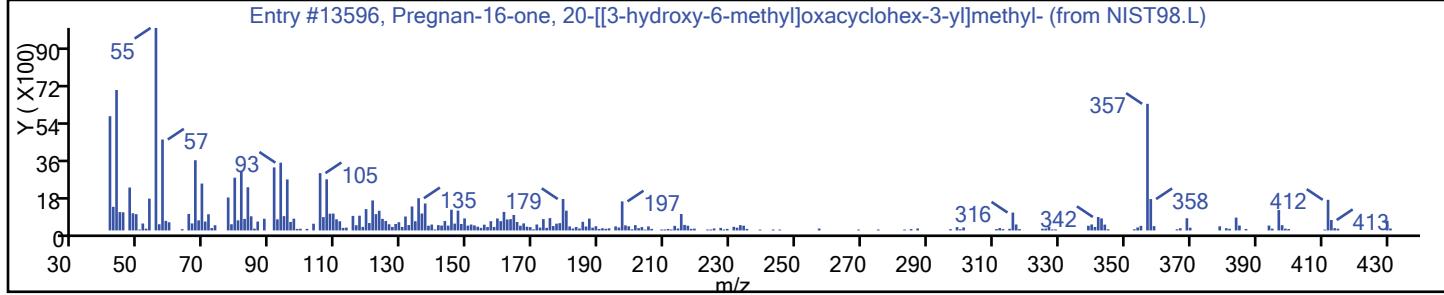
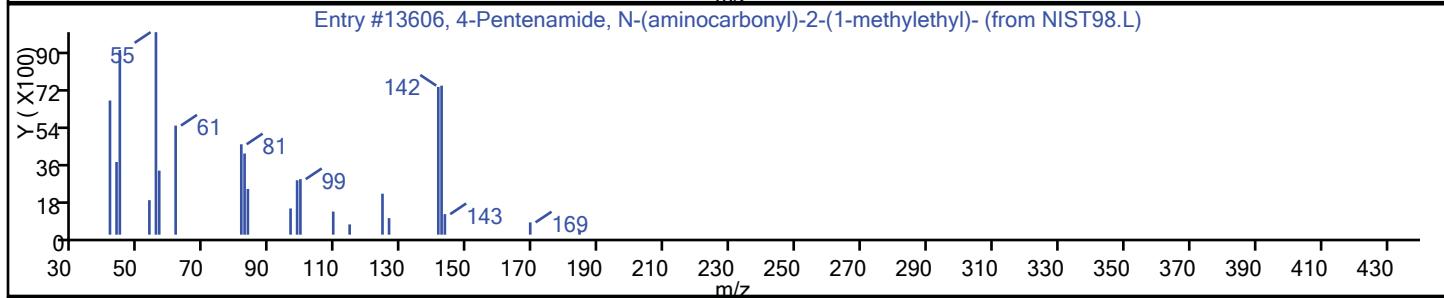
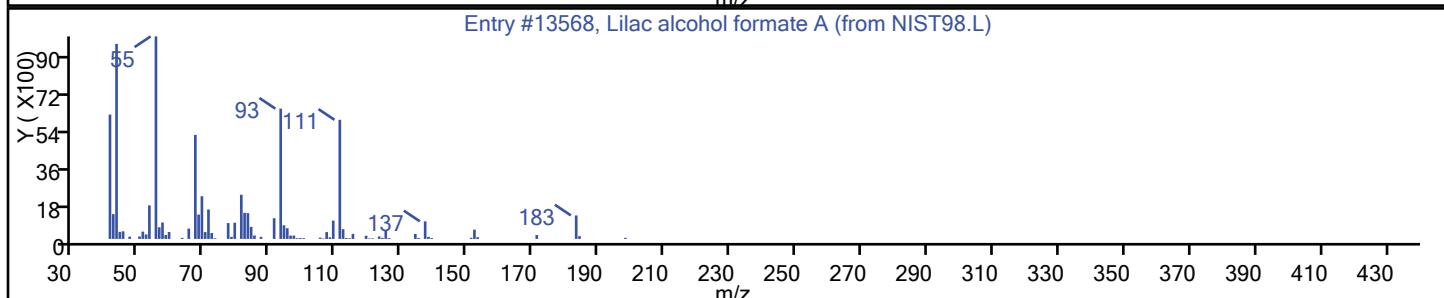
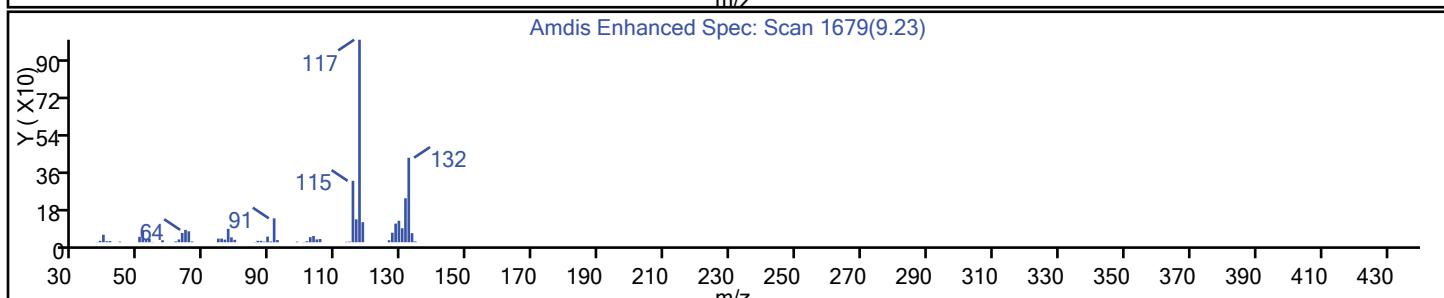
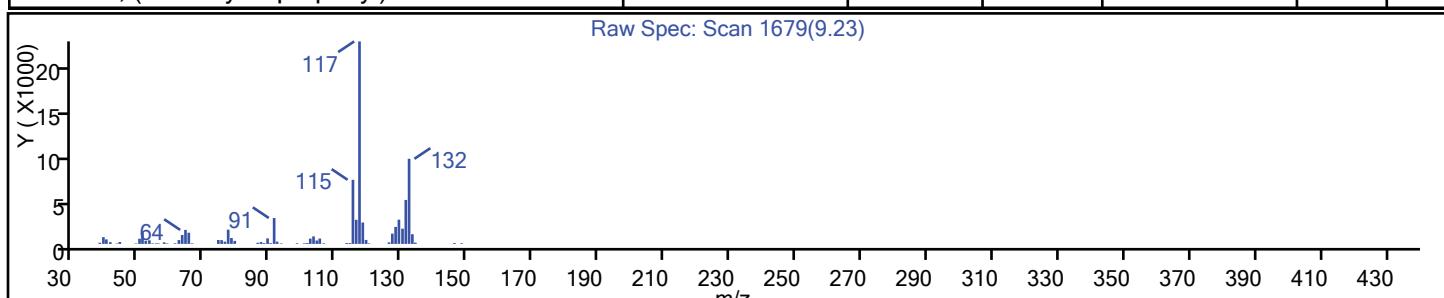
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98	14356	C10H14	134	97
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98.L	14355	C10H14	134	97
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98.L	14358	C10H14	134	97



## TestAmerica Nashville

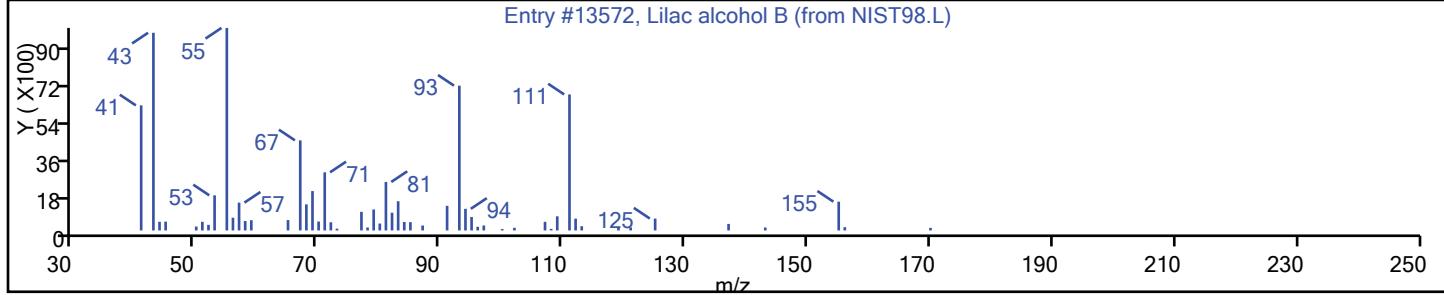
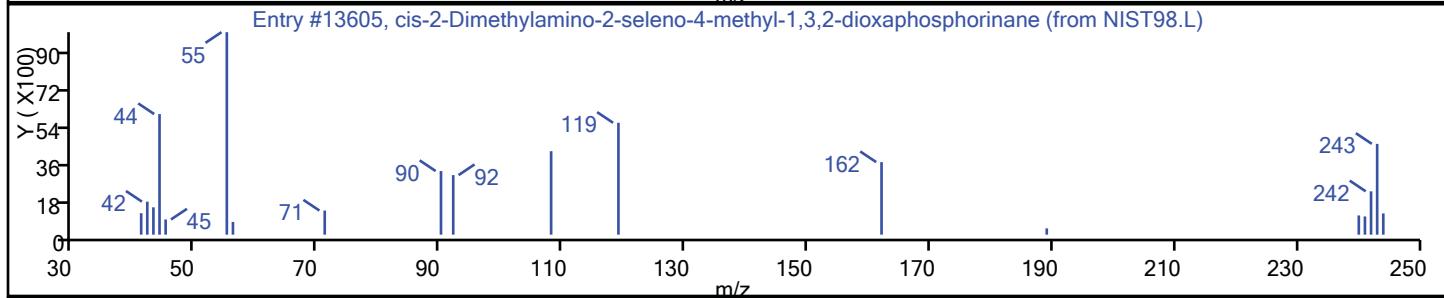
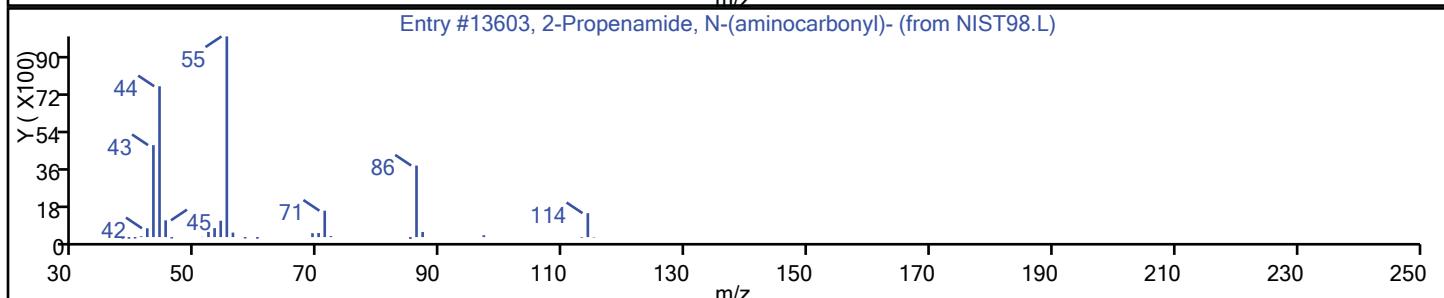
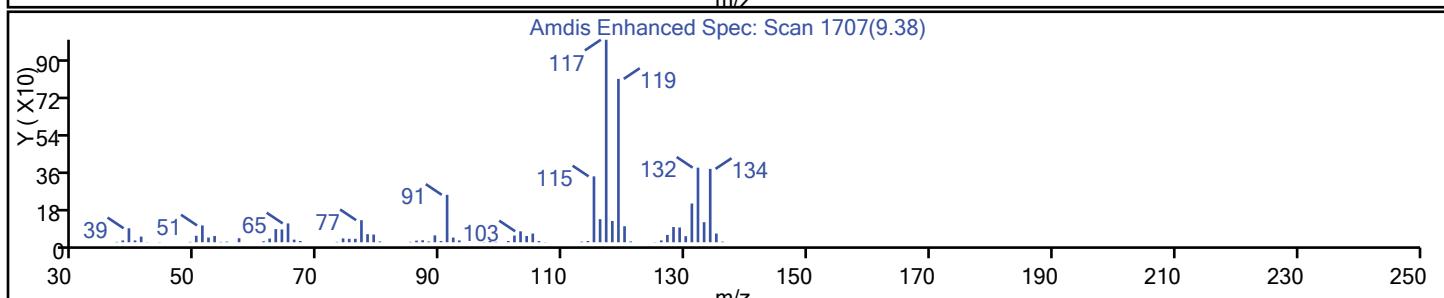
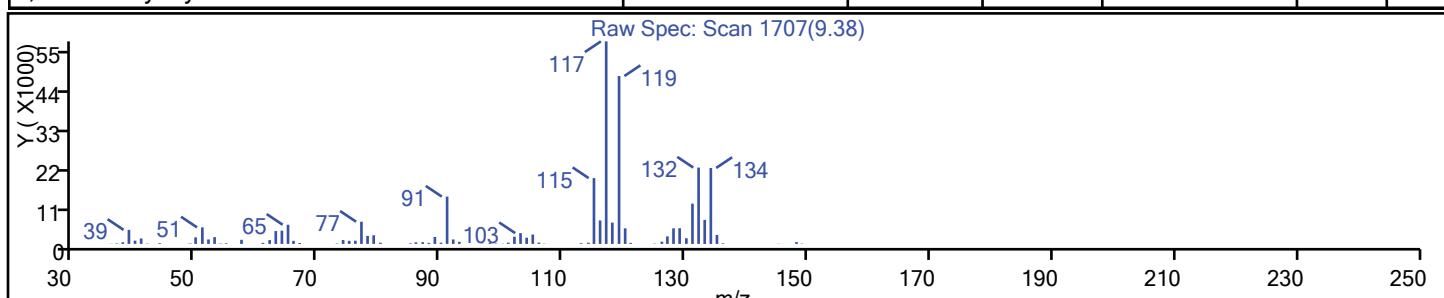
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 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
3-Phenylbut-1-ene	934-10-1	NIST98	13568	C10H12	132	87
1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	NIST98.L	13606	C10H12	132	83
Benzene, (2-methyl-2-propenyl)-	3290-53-7	NIST98.L	13596	C10H12	132	83



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-22.D  
 Injection Date: 08-Jun-2015 20:05:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-8 Lab Sample ID: 490-79645-8  
 Client ID: RW-6A-060115  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2-ethenyl-1,4-dimethyl-	2039-89-6	NIST98	13603	C10H12	132	89
1H-Indene, 2,3-dihydro-5-methyl-	874-35-1	NIST98.L	13605	C10H12	132	87
2,4-Dimethylstyrene	2234-20-0	NIST98.L	13572	C10H12	132	80



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79645-9

Matrix: Water

Lab File ID: 060515-36.D

Analysis Method: 8260C

Date Collected: 06/01/2015 00:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 03:19

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79645-9

Matrix: Water

Lab File ID: 060515-36.D

Analysis Method: 8260C

Date Collected: 06/01/2015 00:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 03:19

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
1868-53-7	Dibromofluoromethane (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	107		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79645-9

Matrix: Water

Lab File ID: 060515-36.D

Analysis Method: 8260C

Date Collected: 06/01/2015 00:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 03:19

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

Number TICs Found: 2

TIC Result Total: 56.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		none	
67-63-0	Isopropyl alcohol	1.92	50	
75-65-0	2-Methyl-2-propanol	2.12	6.8	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-36.D  
 Lims ID: 490-79645-A-9 Lab Sample ID: 490-79645-9  
 Client ID: Trip Blank  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 03:19:30 ALS Bottle#: 36 Worklist Smp#: 9  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-9  
 Misc. Info.: 490-0056110-009  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:51:01 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:51:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.446	0.004	99	403257	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.711	0.004	84	302238	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.827	7.823	0.004	94	151589	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.027	-0.001	94	94972	24.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.239	0.004	0	86286	25.2	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.551	0.004	92	402091	26.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.750	-0.001	96	126913	28.3	
23 Acetone	58	1.850	1.842	0.008	98	548	2.55	
44 2-Butanone (MEK)	72	2.797	2.762	0.035	5	201	0.8510	
90 m-Xylene & p-Xylene	91	5.965	5.935	0.030	0	1312	0.0816	
91 o-Xylene	91	6.313	6.278	0.035	88	854	0.0535	
S 134 Xylenes, Total	1				0		0.1351	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-36.D  
 Lims ID: 490-79645-A-9 Lab Sample ID: 490-79645-9  
 Client ID: Trip Blank  
 Sample Type: Client  
 Inject. Date: 06-Jun-2015 03:19:30 ALS Bottle#: 36 Worklist Smp#: 9  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-A-9  
 Misc. Info.: 490-0056110-009  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 10-Jun-2015 09:51:01 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:51:01

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Isopropyl alcohol	1.915	4308	49.6	
2-Methyl-2-propanol	2.117	981	6.75	
BFB	6.749	126913		

**Reagents:**

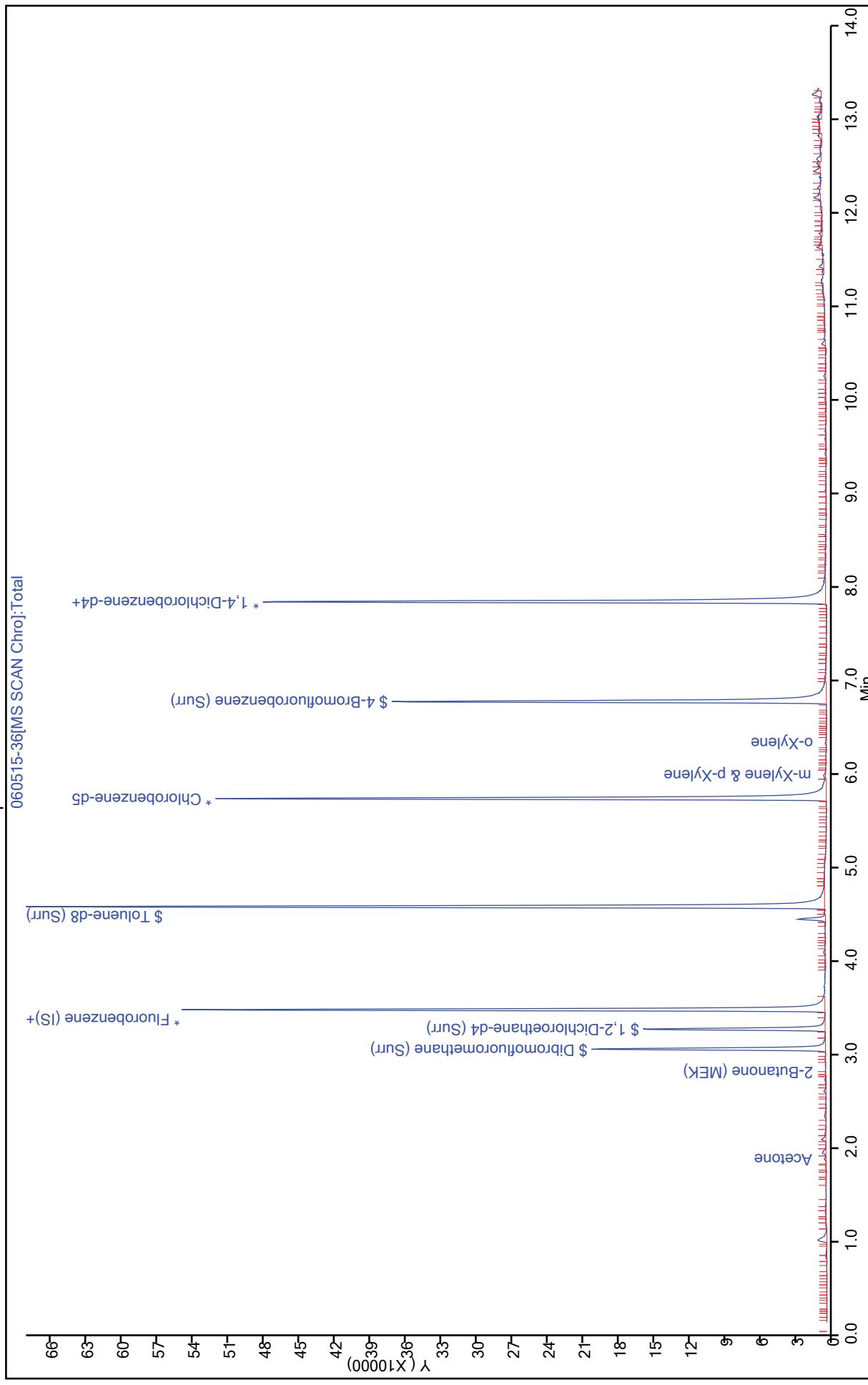
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 09:51:02

Chrom Revision: 2.2 14-May-2015 11:41:56

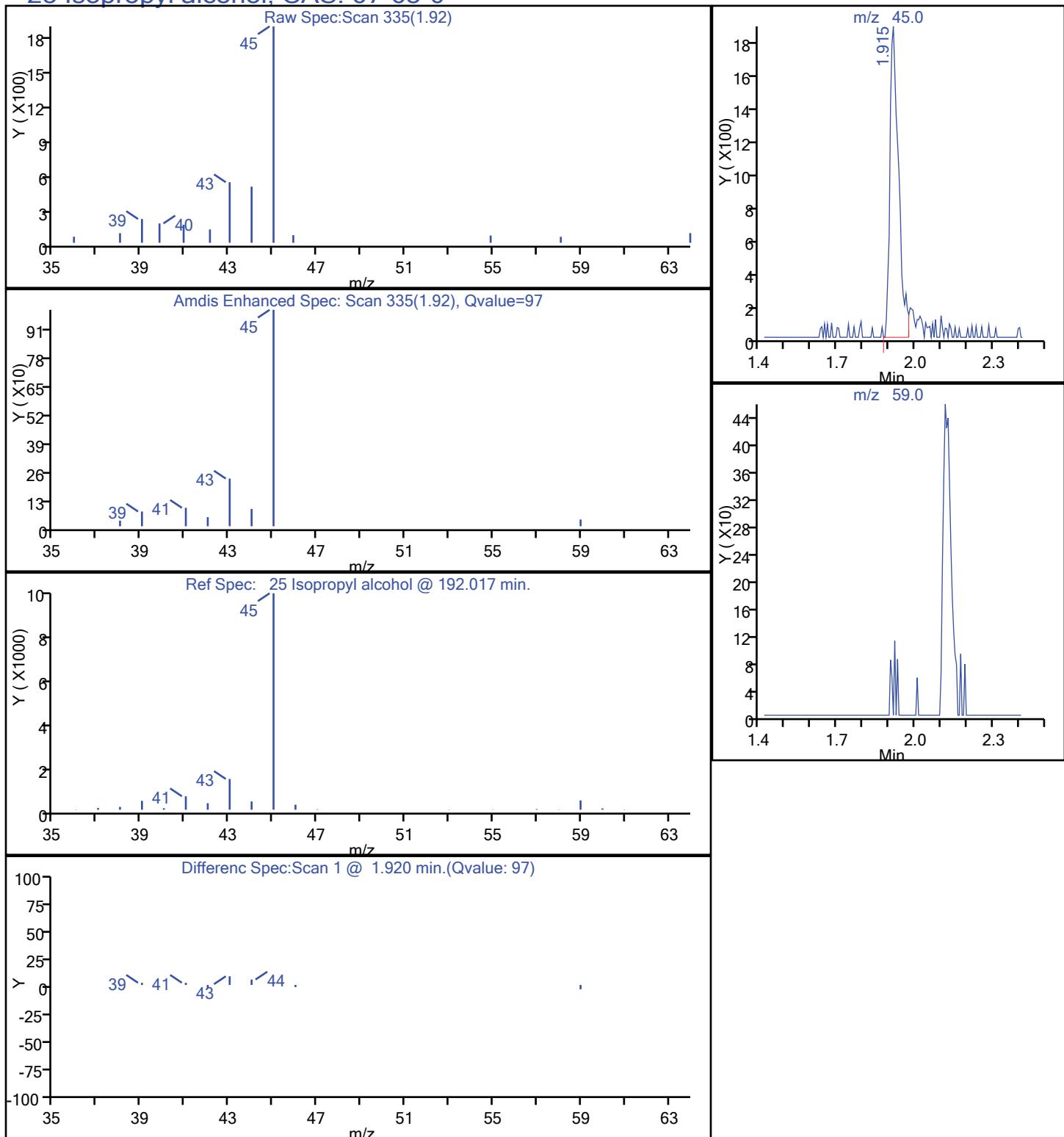
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Injection Date: 06-Jun-2015 03:19:30  
Lims ID: 490-79645-A-9  
Client ID: Trip Blank  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 9  
Instrument ID: HP32  
Lab Sample ID: 490-79645-9  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



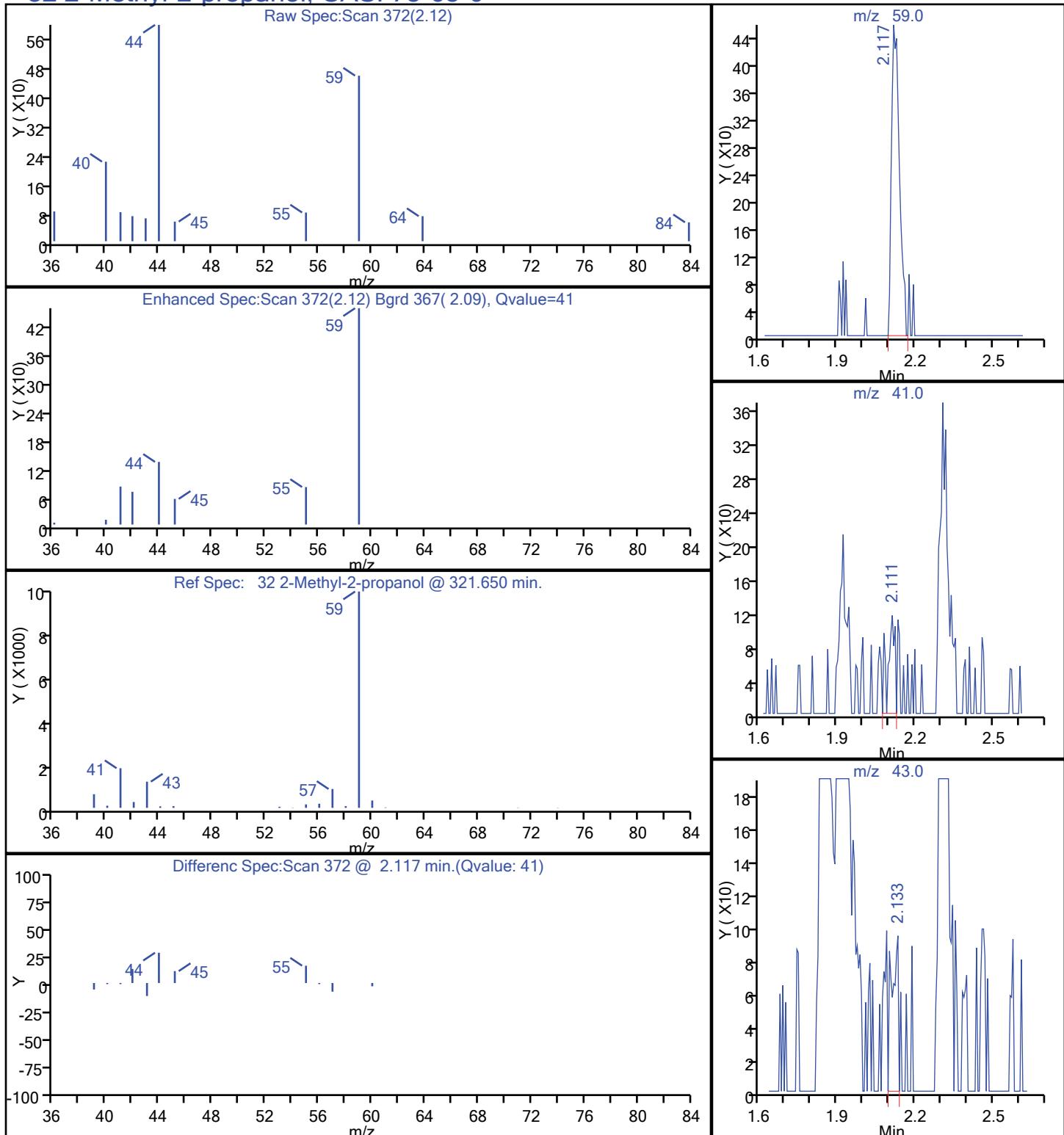
## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-36.D  
 Injection Date: 06-Jun-2015 03:19:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-9 Lab Sample ID: 490-79645-9  
 Client ID: Trip Blank  
 Operator ID: EML ALS Bottle#: 36 Worklist Smp#: 9  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**25 Isopropyl alcohol, CAS: 67-63-0**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-36.D  
 Injection Date: 06-Jun-2015 03:19:30 Instrument ID: HP32  
 Lims ID: 490-79645-A-9 Lab Sample ID: 490-79645-9  
 Client ID: Trip Blank  
 Operator ID: EML ALS Bottle#: 36 Worklist Smp#: 9  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 32 2-Methyl-2-propanol, CAS: 75-65-0



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SC-01-060215

Lab Sample ID: 490-79781-1

Matrix: Ground Water

Lab File ID: 060515-12.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 16:04

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	1.6		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U F2	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.27	J	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	1.1		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	1.7		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.70		0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.76		0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	1.3		1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	1.2		0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SC-01-060215

Lab Sample ID: 490-79781-1

Matrix: Ground Water

Lab File ID: 060515-12.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 16:04

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.76		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	48		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		70-130
1868-53-7	Dibromofluoromethane (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	107		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: SC-01-060215 Lab Sample ID: 490-79781-1  
 Matrix: Ground Water Lab File ID: 060515-12.D  
 Analysis Method: 8260C Date Collected: 06/02/2015 09:45  
 Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 16:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 253850 Units: ug/L  
 Number TICs Found: 16 TIC Result Total: 108.74

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		6.2	J
123-73-9	2-Butenal, (E)-	0.98	55	J N
110-54-3	Hexane	2.34	0.33	J
96-37-7	Cyclopentane, methyl-	2.68	3.0	J N
95-47-6	o-Xylene	6.29	2.4	
103-65-1	N-Propylbenzene	7.01	0.49	J
108-67-8	1,3,5-Trimethylbenzene	7.17	1.0	
95-63-6	1,2,4-Trimethylbenzene	7.51	4.6	
36617-02-4	Benzene, (2-bromocyclopropyl)-	8.09	4.1	J N
104-51-8	n-Butylbenzene	8.21	0.62	
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	8.48	2.9	J N
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	8.55	5.7	J N
488-23-3	Benzene, 1,2,3,4-tetramethyl-	8.93	3.7	J N
95-93-2	Benzene, 1,2,4,5-tetramethyl-	8.98	7.3	J N
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	9.39	6.5	J N
91-20-3	Naphthalene	10.08	4.9	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 16:04:30 ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-1  
 Misc. Info.: 490-0056059-012  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 15:40:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.447	0.005	99	349302	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	257693	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	94	137667	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.028	-0.001	94	85504	25.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.240	-0.001	0	77988	26.3	
\$ 6 Toluene-d8 (Surr)	98	4.557	4.552	0.005	93	341884	26.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.750	6.751	-0.001	96	105984	26.0	
10 Dichlorodifluoromethane	85	1.067	1.063	0.004	98	2766	0.6970	
15 Chloroethane	64	1.432	1.427	0.005	98	3397	1.08	
25 Isopropyl alcohol	45	1.911	1.912	-0.001	42	613	5.50	
36 Hexane	57	2.341	2.336	0.005	89	1656	0.3256	
42 cis-1,2-Dichloroethene	61	2.760	2.745	0.015	75	591	0.1018	
53 Cyclohexane	56	3.076	3.077	-0.001	88	10546	1.65	
57 Benzene	78	3.283	3.273	0.010	94	24799	1.56	
65 Methylcyclohexane	83	3.816	3.812	0.004	88	8474	1.18	
76 Toluene	91	4.617	4.606	0.011	98	13227	0.7554	
87 Chlorobenzene	112	5.743	5.739	0.005	92	3039	0.2740	
89 Ethylbenzene	91	5.841	5.831	0.010	98	13233	0.7553	
90 m-Xylene & p-Xylene	91	5.934	5.934	0.000	0	629405	45.9	
91 o-Xylene	91	6.288	6.277	0.011	97	32801	2.41	
94 Isopropylbenzene	105	6.620	6.609	0.011	96	22095	1.29	
100 N-Propylbenzene	91	7.006	6.991	0.016	99	9077	0.4875	
102 1,3,5-Trimethylbenzene	105	7.170	7.159	0.011	96	13678	1.00	
106 1,2,4-Trimethylbenzene	105	7.513	7.502	0.011	97	63005	4.60	
107 sec-Butylbenzene	105	7.670	7.660	0.010	90	2706	0.1582	
109 4-Isopropyltoluene	119	7.817	7.807	0.010	79	4367	0.2877	
110 1,4-Dichlorobenzene	146	7.850	7.845	0.005	82	1244	0.1455	
111 1,2,3-Trimethylbenzene	105	7.904	7.900	0.004	97	48133	3.48	
113 1,2-Dichlorobenzene	146	8.226	8.194	0.032	46	468	0.0652	
114 n-Butylbenzene	91	8.209	8.199	0.010	97	7476	0.6213	

Report Date: 09-Jun-2015 15:40:10

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File:

\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-12.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
119 Naphthalene	128	10.082	10.055	0.027	97	30186	4.95	
S 134 Xylenes, Total	1				0		48.3	
S 137 1,2-Dichloroethene, Total	1				0		0.1018	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-12.D  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 16:04:30 ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-1  
 Misc. Info.: 490-0056059-012  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 15:40:07

## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
123-73-9	2-Butenal, (E)-							
0.980	1600876	55.2	1	64	517	C4H6O	70	I
96-37-7	Cyclopentane, methyl-							
2.684	88316	3.05	1	91	1471	C6H12	84	
36617-02-4	Benzene, (2-bromocyclopropyl)-							
8.090	125359	4.15	3	59	53973	C9H9Br	196	
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-							
8.481	86645	2.86	3	95	14402	C10H14	134	
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-							
8.552	173818	5.75	3	97	14366	C10H14	134	
488-23-3	Benzene, 1,2,3,4-tetramethyl-							
8.933	110715	3.66	3	97	14357	C10H14	134	I
95-93-2	Benzene, 1,2,4,5-tetramethyl-							
8.982	220574	7.29	3	97	14355	C10H14	134	
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-							
9.385	197748	6.54	3	70	13603	C10H12	132	

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 1 Fluorobenzene (IS)	3.452	724644	25.0
* 3 1,4-Dichlorobenzene-d4	7.823	756083	25.0

**QC Flag Legend**

Processing Flags

Review Flags

I - User Selected Library Match

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

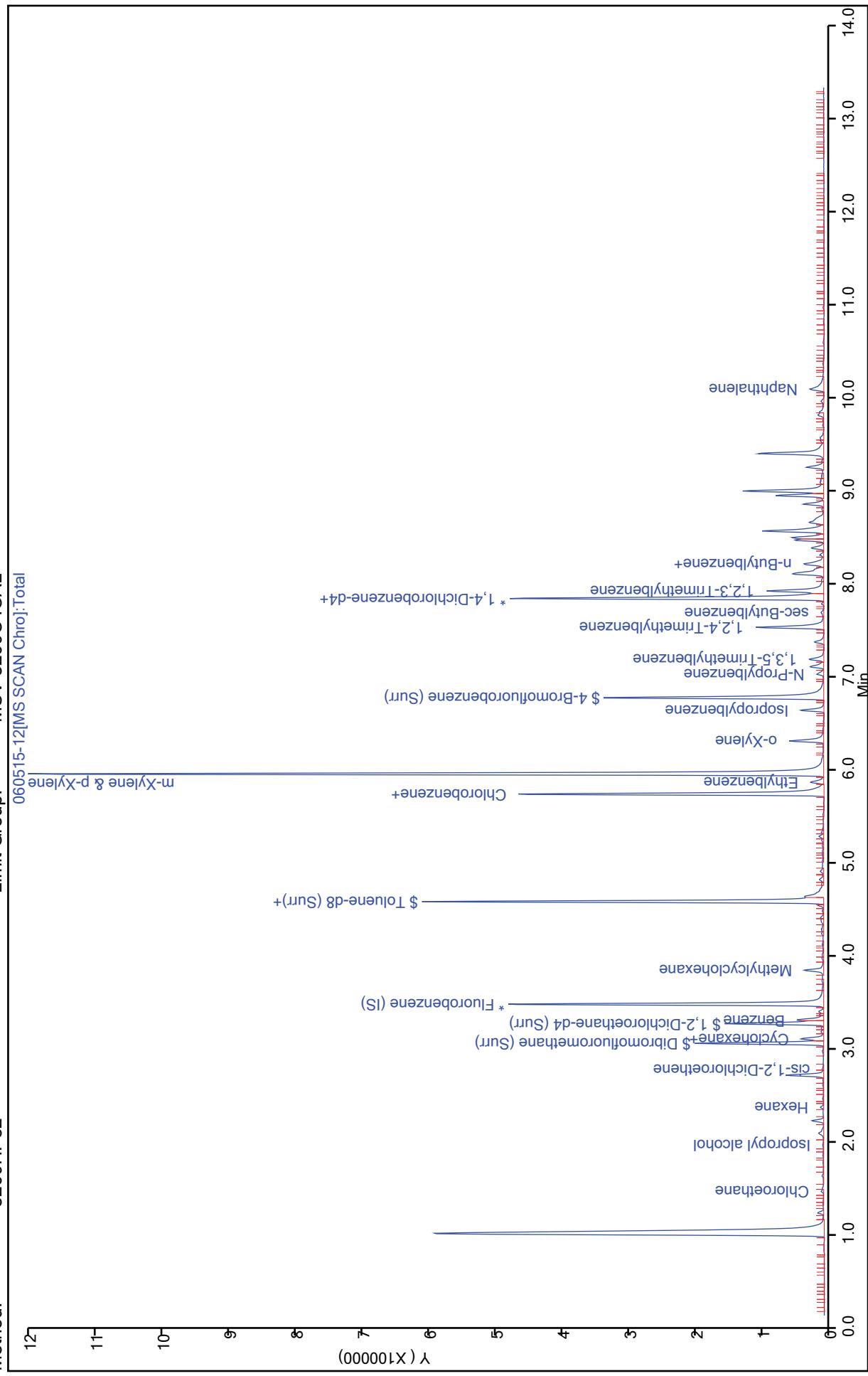
Run Reagent

Report Date: 09-Jun-2015 15:40:10

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
Injection Date: 05-Jun-2015 16:04:30  
Lims ID: 490-79781-A-1  
Client ID: SC-01-060215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 12  
ALS Bottle#: 12  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

ALS Bottle#: 12 Worklist Smp#: 12

Operator ID: EML

Dil. Factor: 1.0000

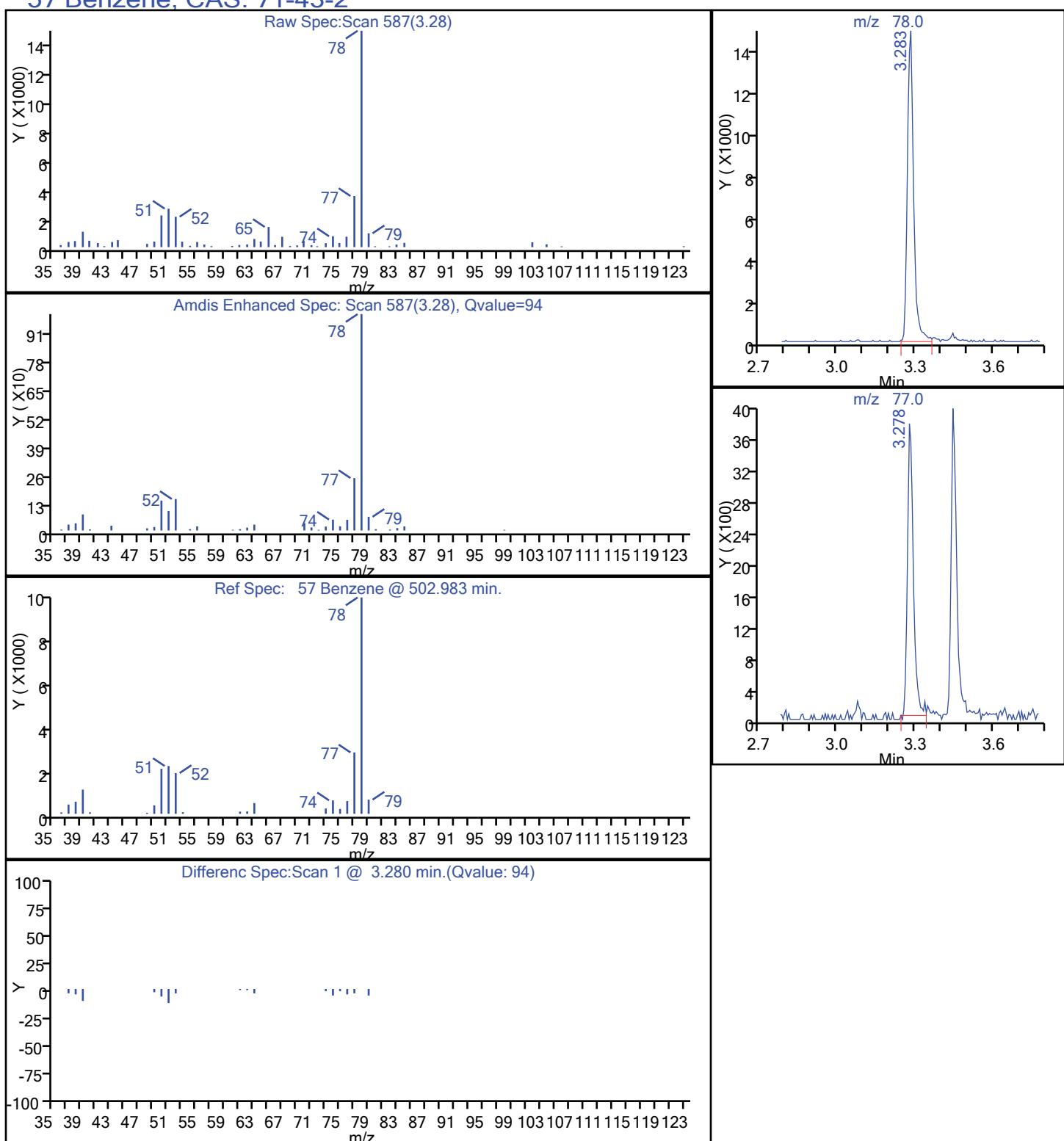
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

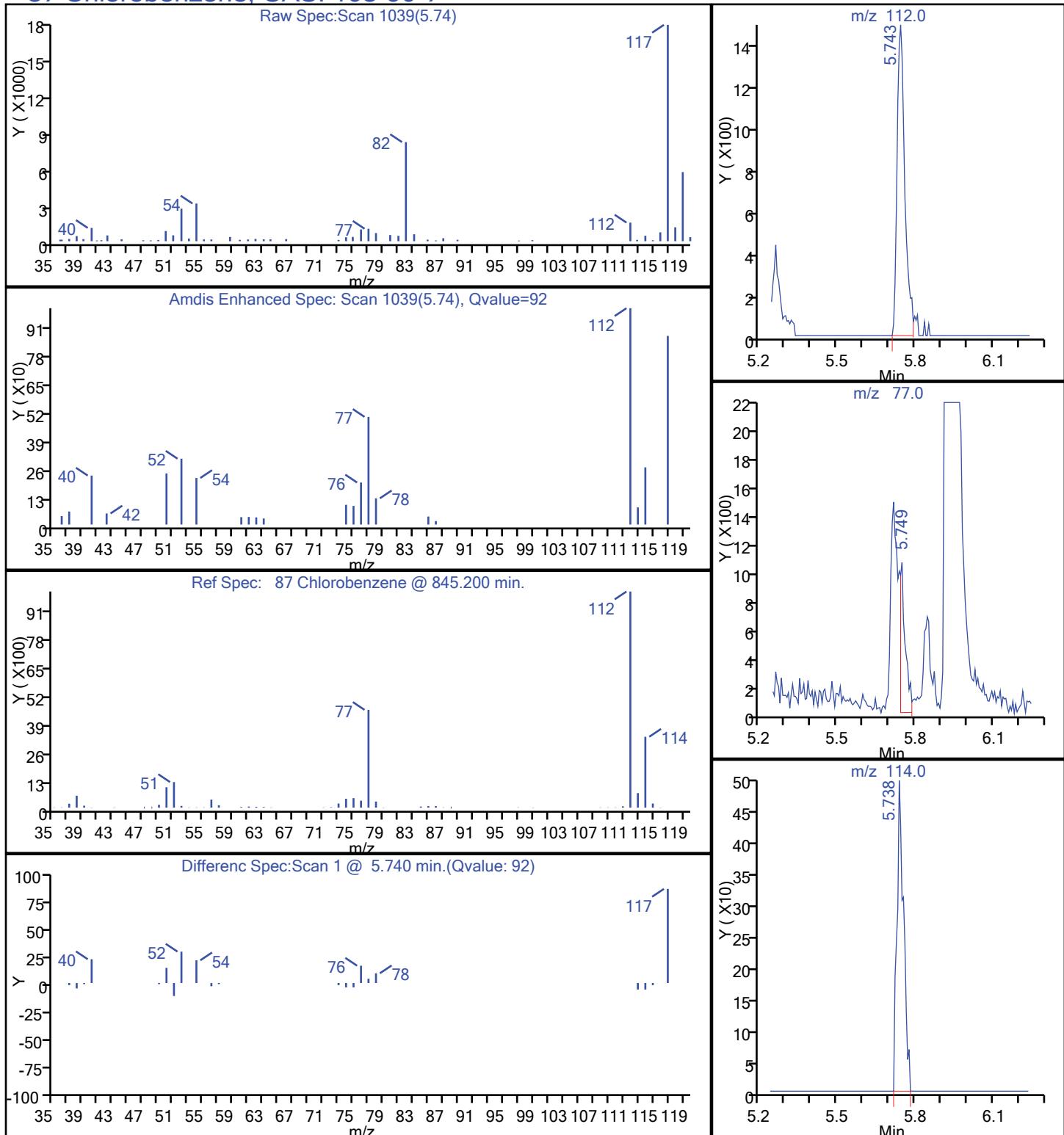
Method: 8260HP32

Detector: MS SCAN

Column:

**57 Benzene, CAS: 71-43-2**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**87 Chlorobenzene, CAS: 108-90-7**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

ALS Bottle#: 12 Worklist Smp#: 12

Operator ID: EML

Dil. Factor: 1.0000

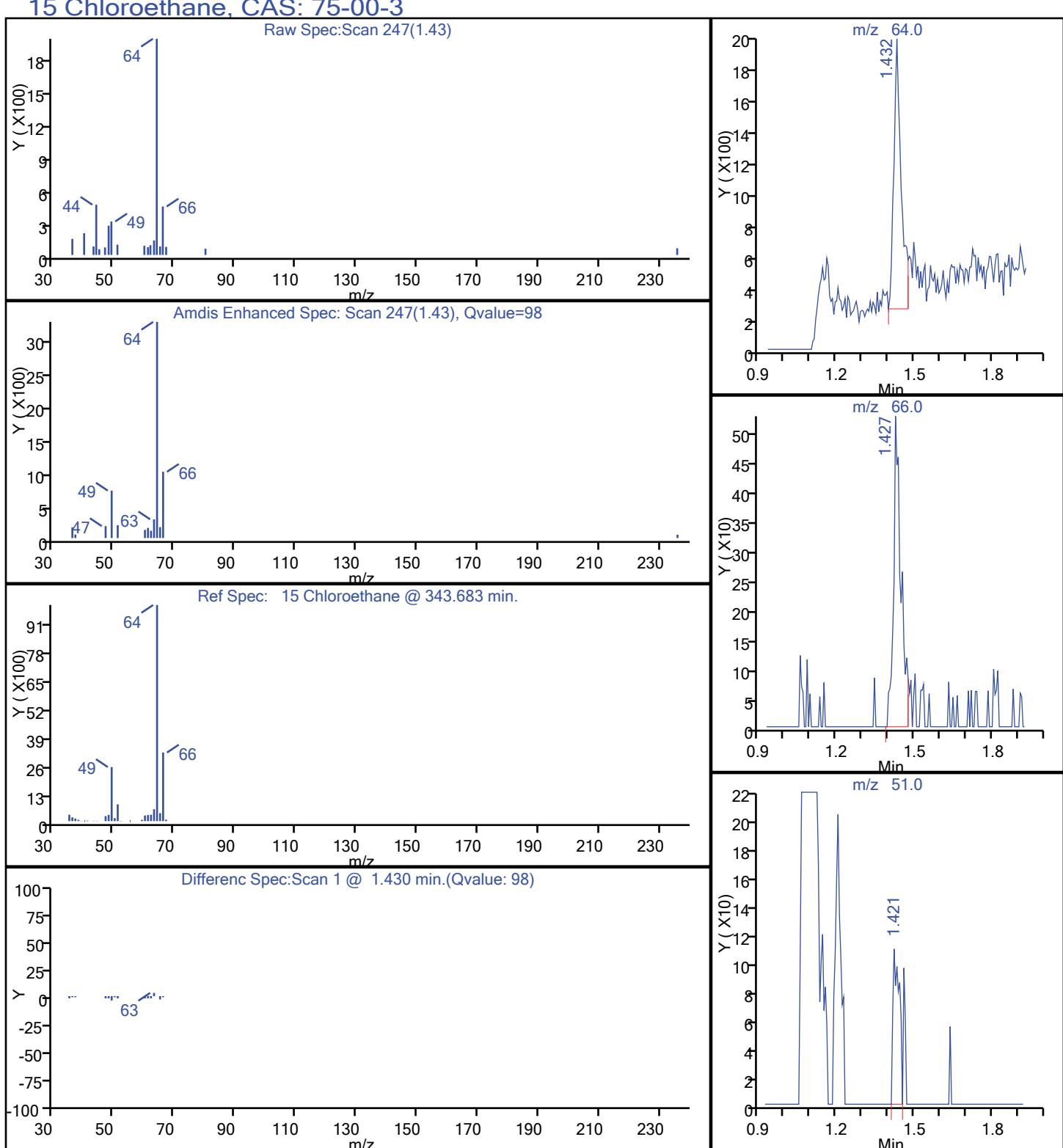
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

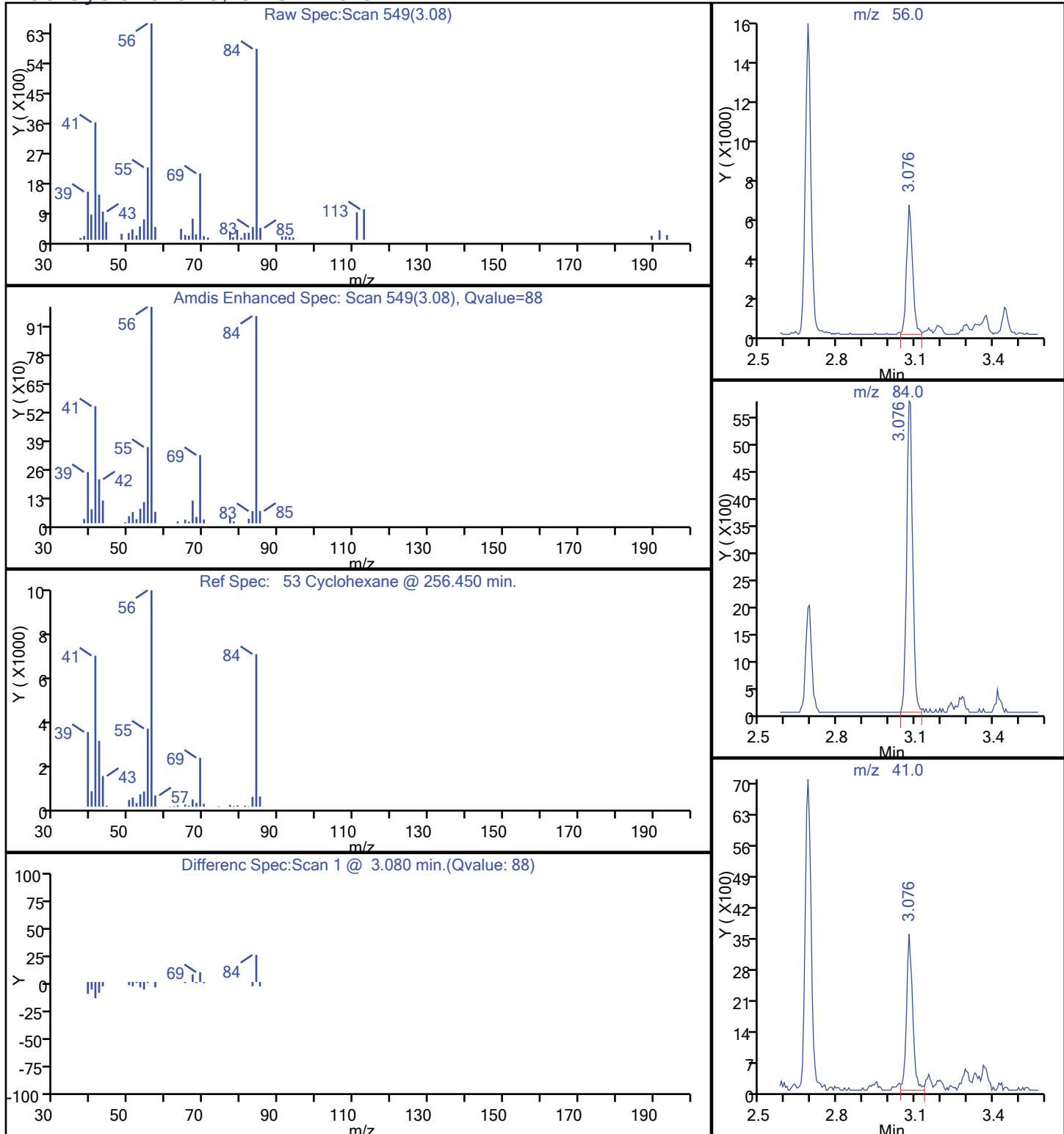
Detector: MS SCAN

Column:

**15 Chloroethane, CAS: 75-00-3**

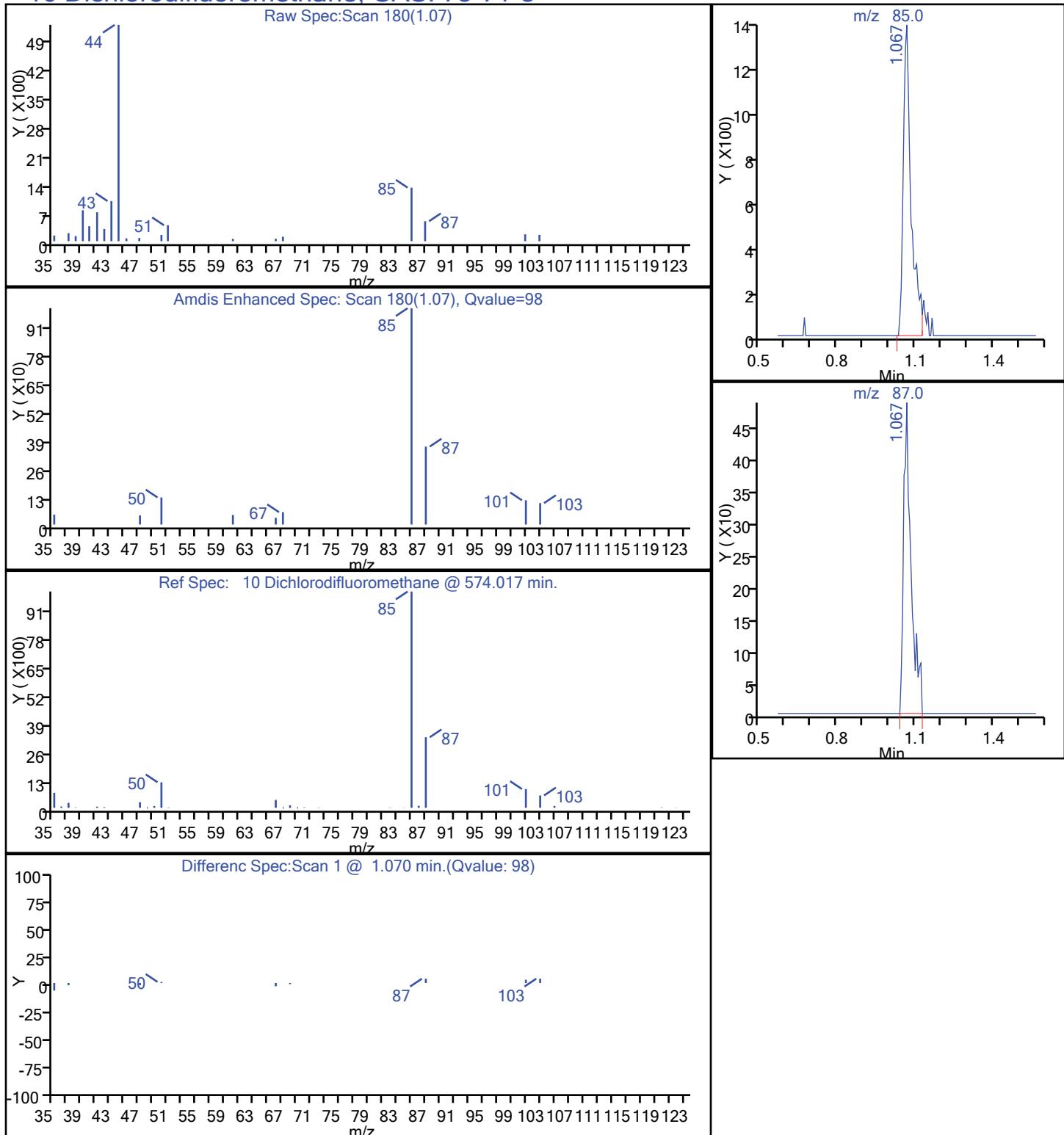
TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 53 Cyclohexane, CAS: 110-82-7



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

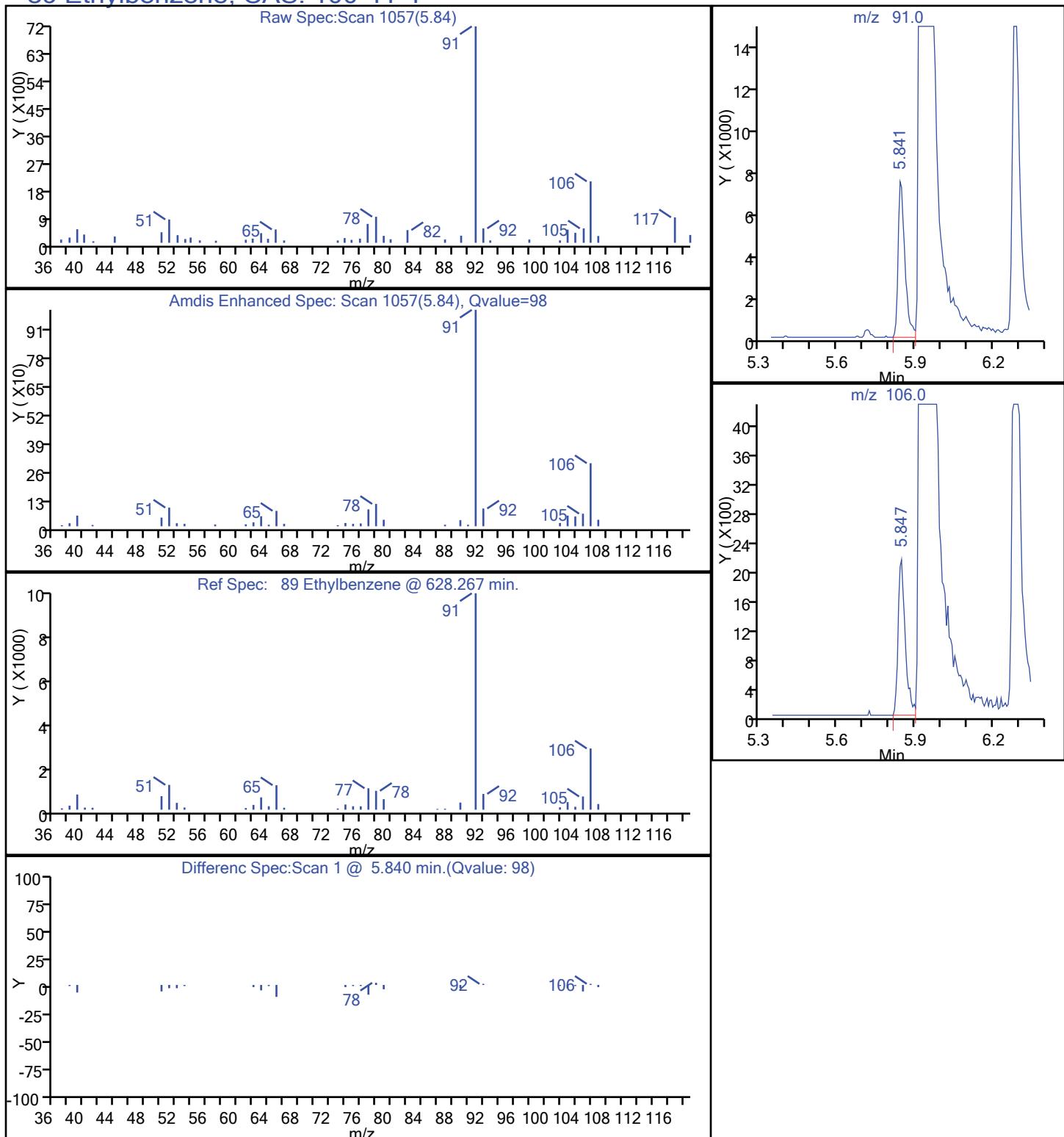
### 10 Dichlorodifluoromethane, CAS: 75-71-8



## TestAmerica Nashville

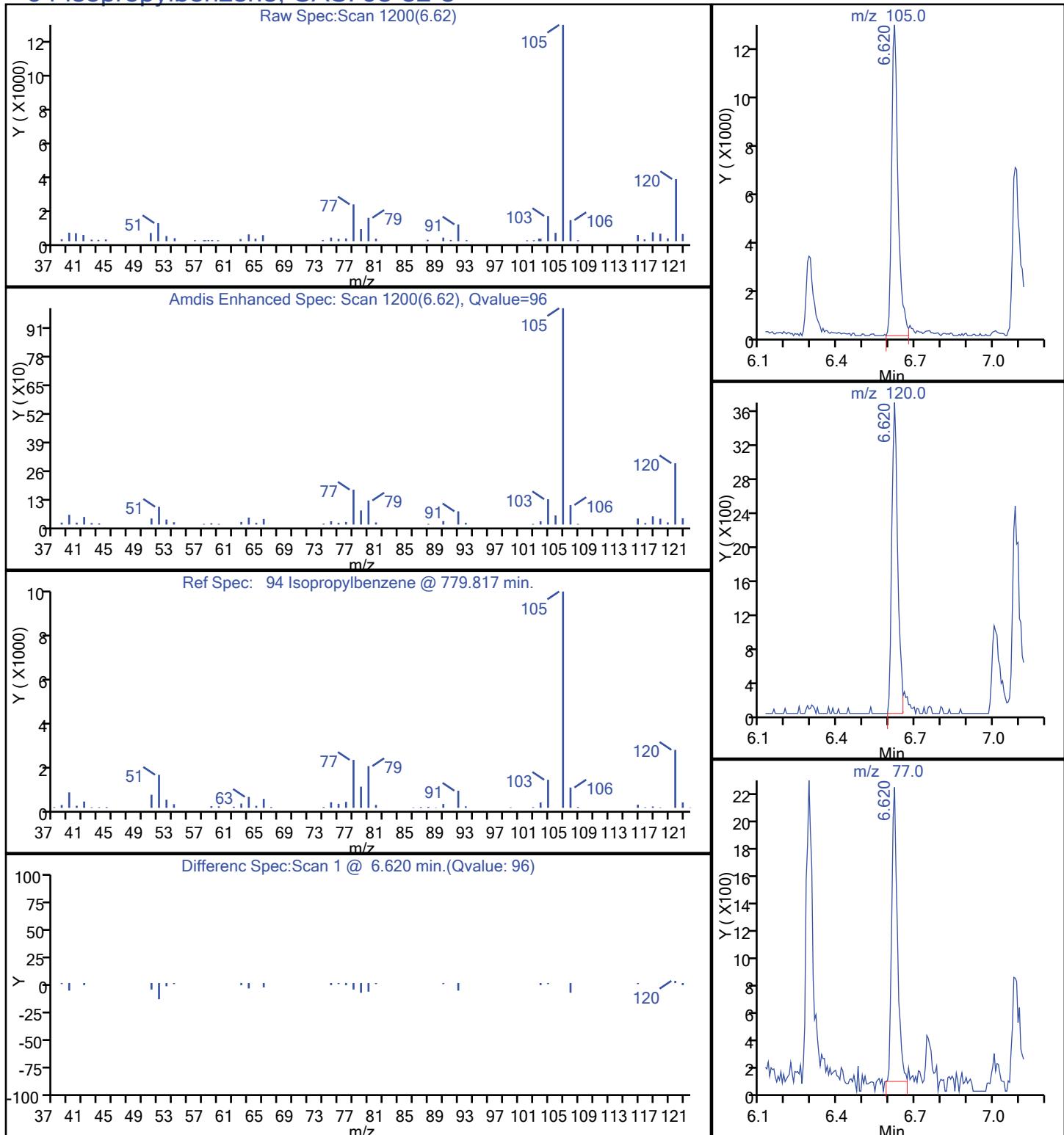
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 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 89 Ethylbenzene, CAS: 100-41-4



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

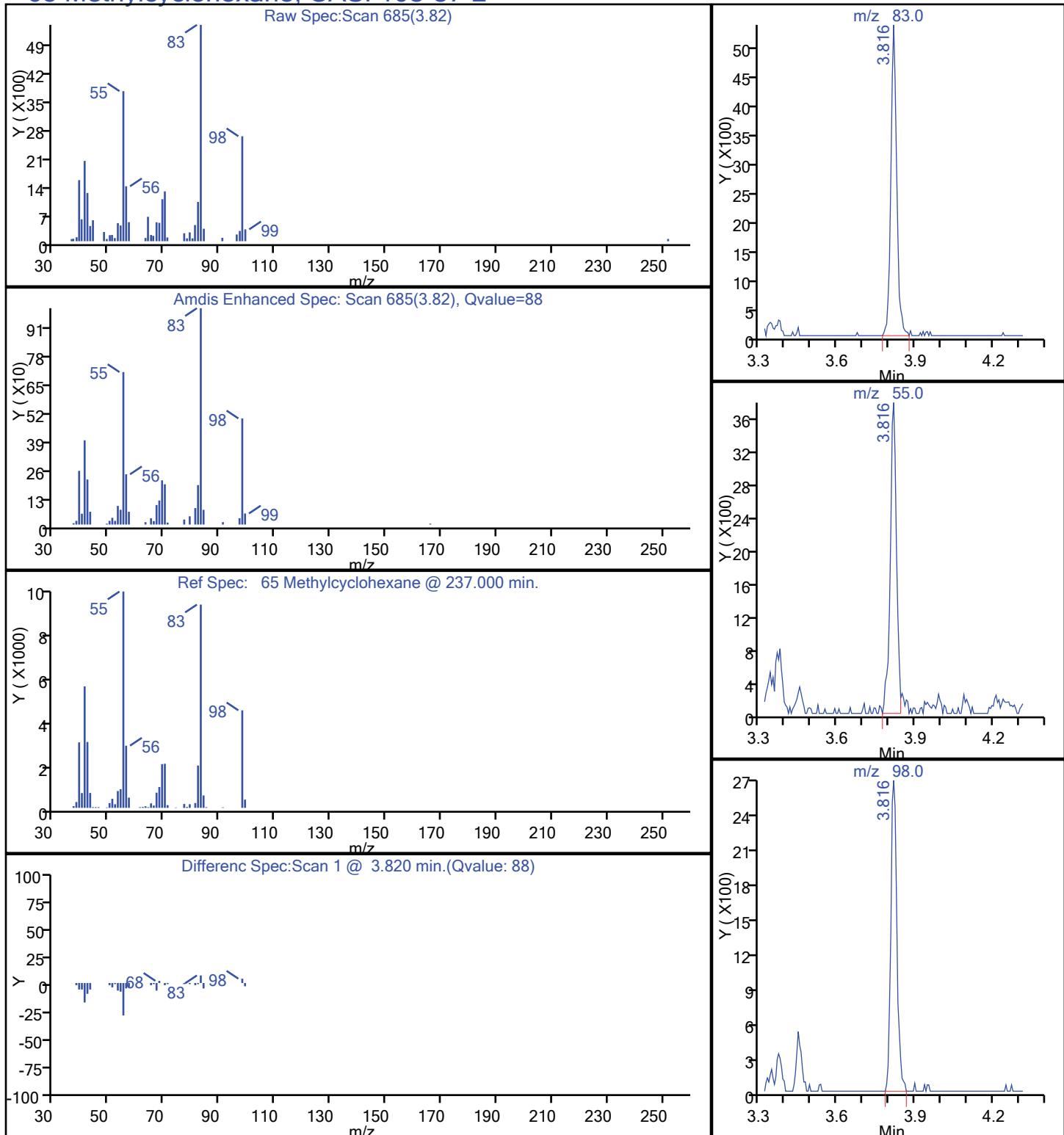
### 94 Isopropylbenzene, CAS: 98-82-8



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

ALS Bottle#: 12 Worklist Smp#: 12

Operator ID: EML

Dil. Factor: 1.0000

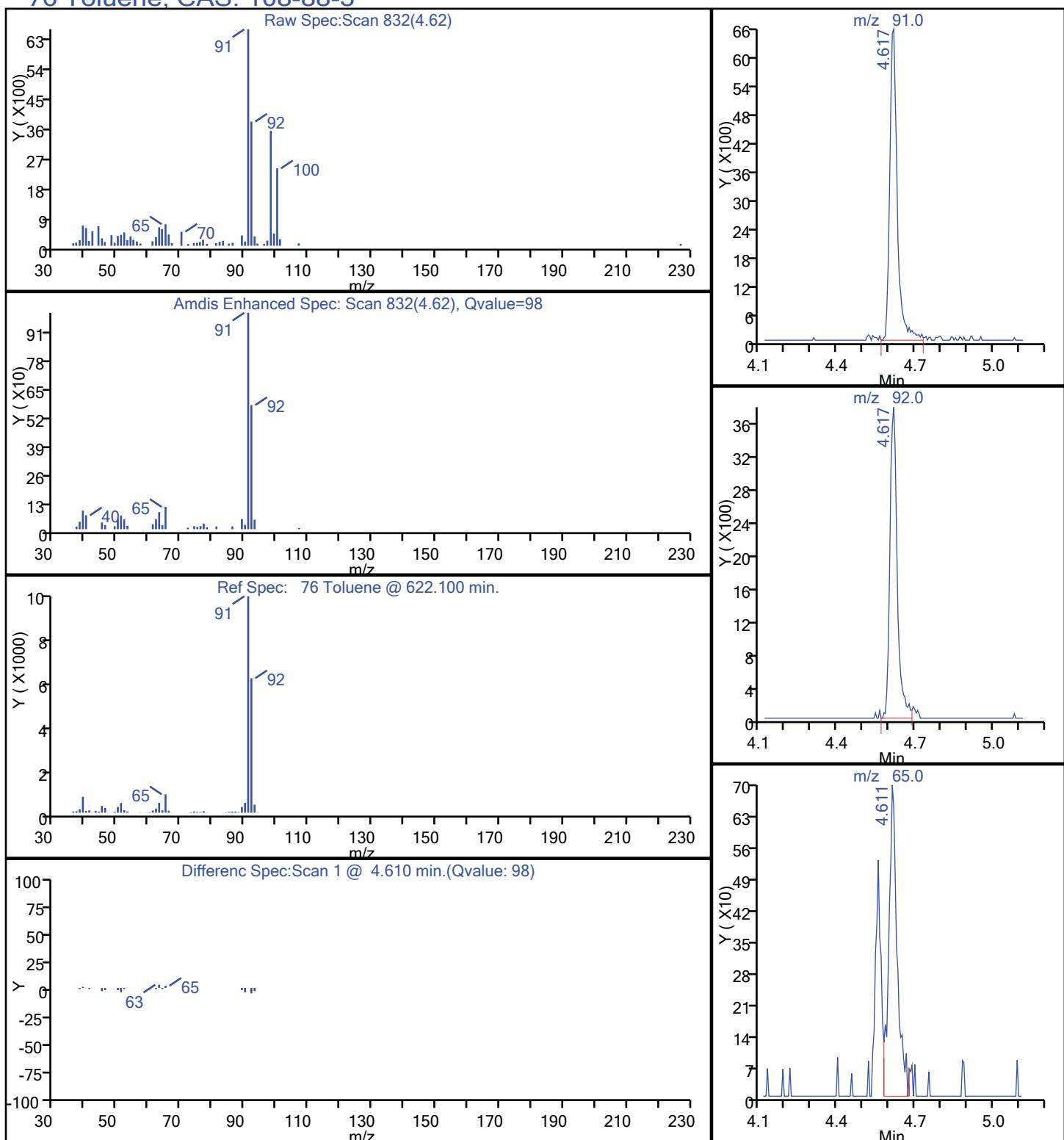
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**76 Toluene, CAS: 108-88-3**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

Operator ID: EML

ALS Bottle#: 12 Worklist Smp#: 12

Purge Vol: 10.000 mL

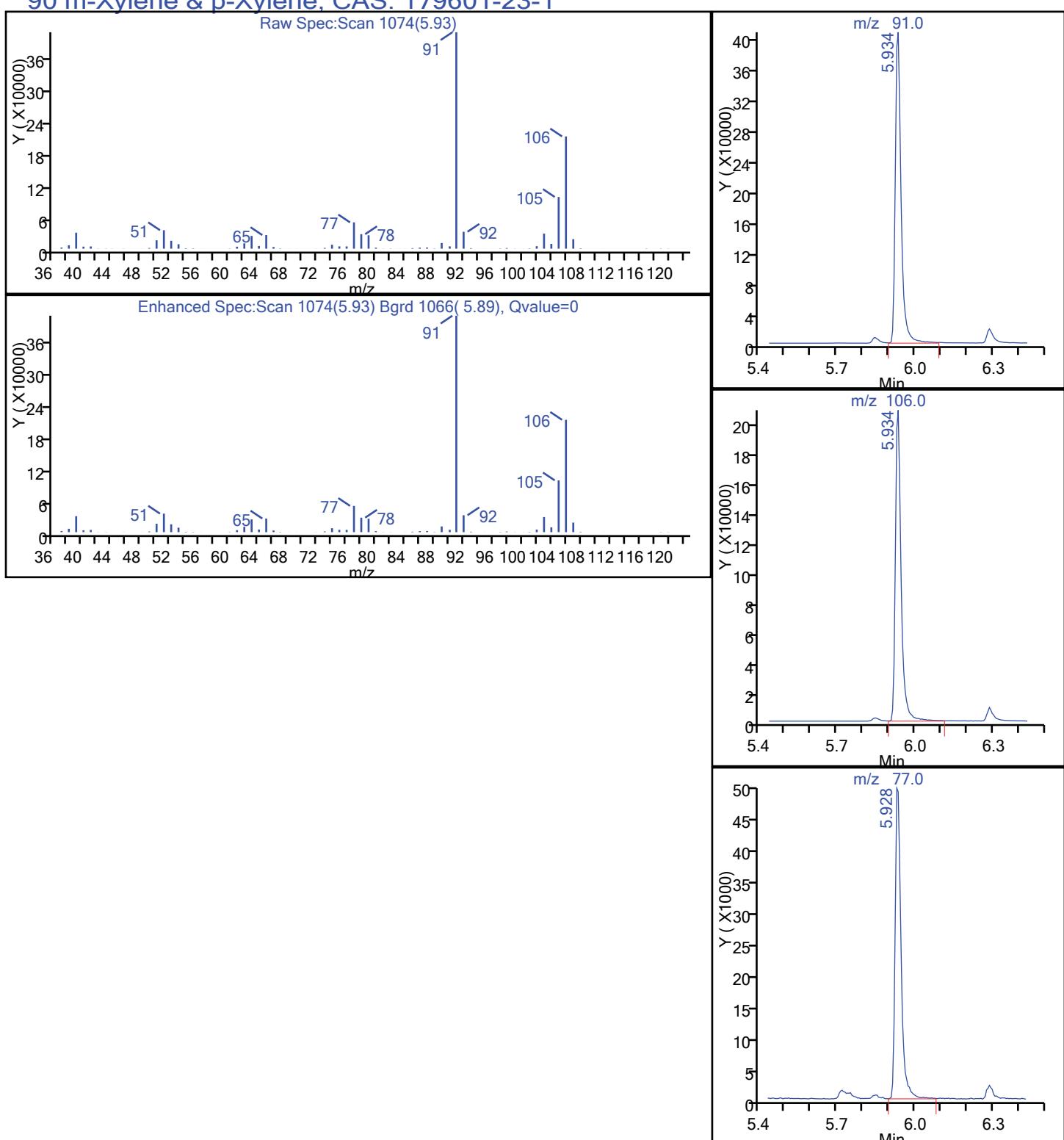
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

**90 m-Xylene & p-Xylene, CAS: 179601-23-1**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

ALS Bottle#: 12 Worklist Smp#: 12

Operator ID: EML

Dil. Factor: 1.0000

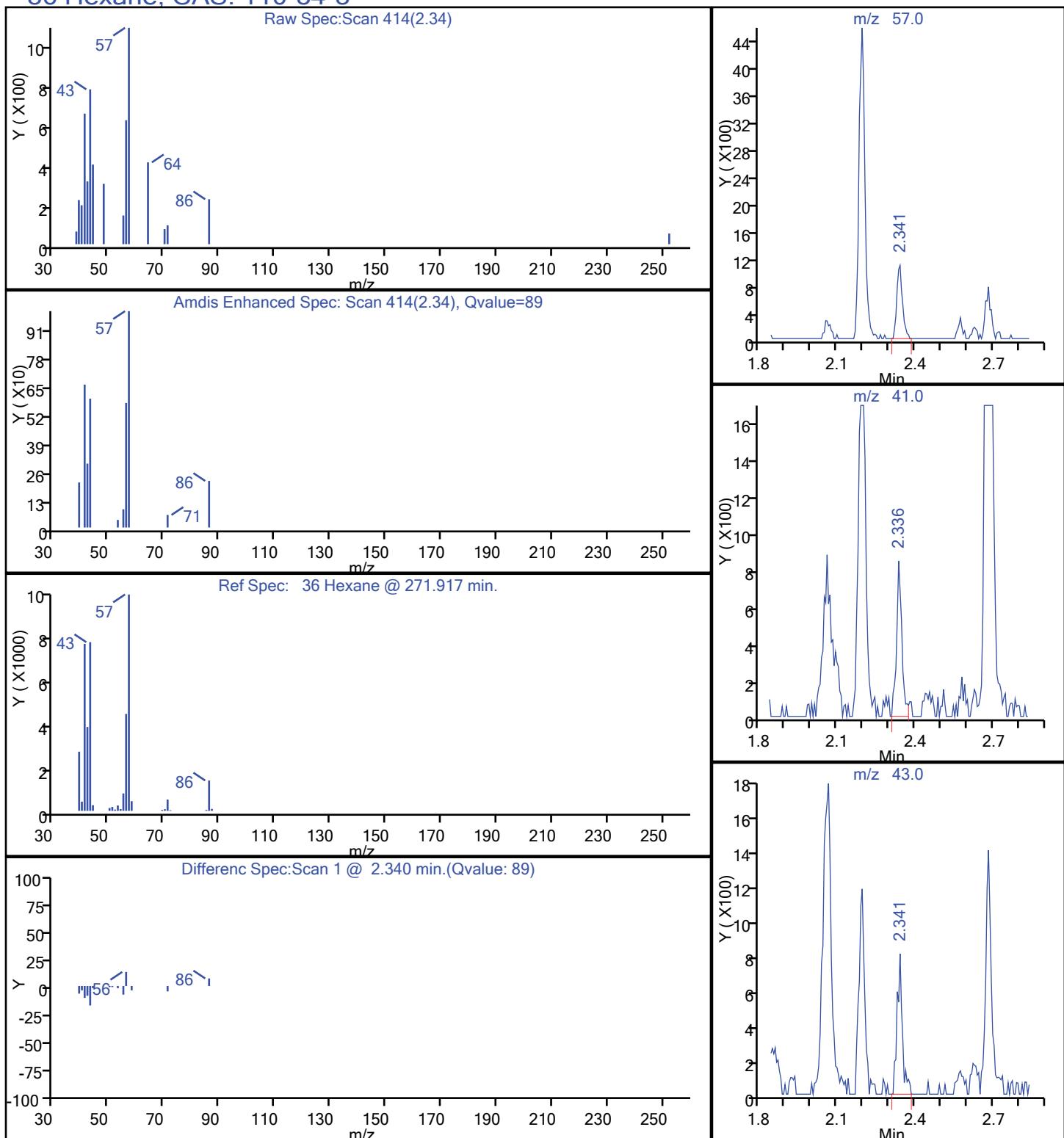
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

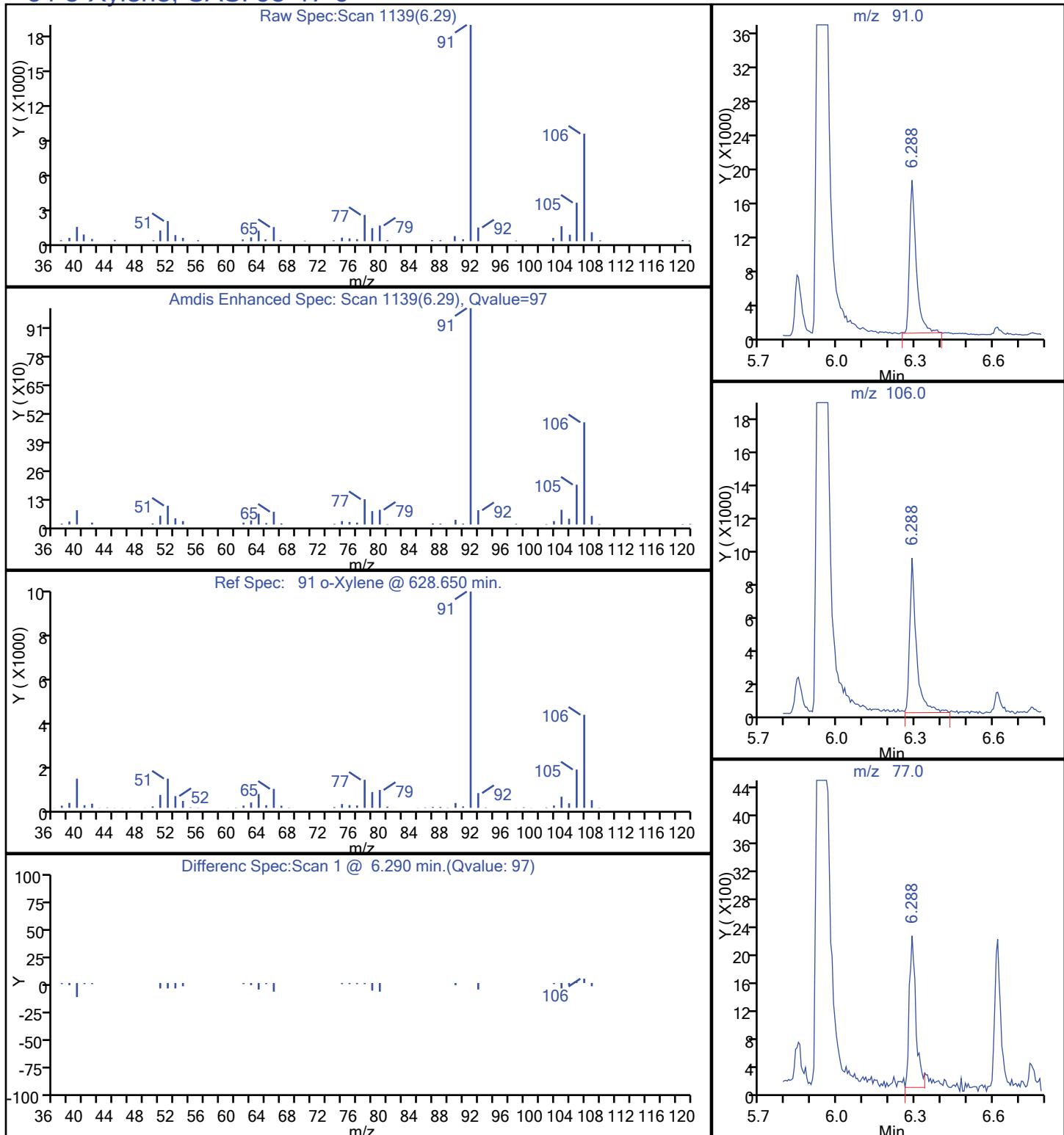
Method: 8260HP32

Detector: MS SCAN

Column:

**36 Hexane, CAS: 110-54-3**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**91 o-Xylene, CAS: 95-47-6**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

Operator ID: EML

ALS Bottle#: 12 Worklist Smp#: 12

Purge Vol: 10.000 mL

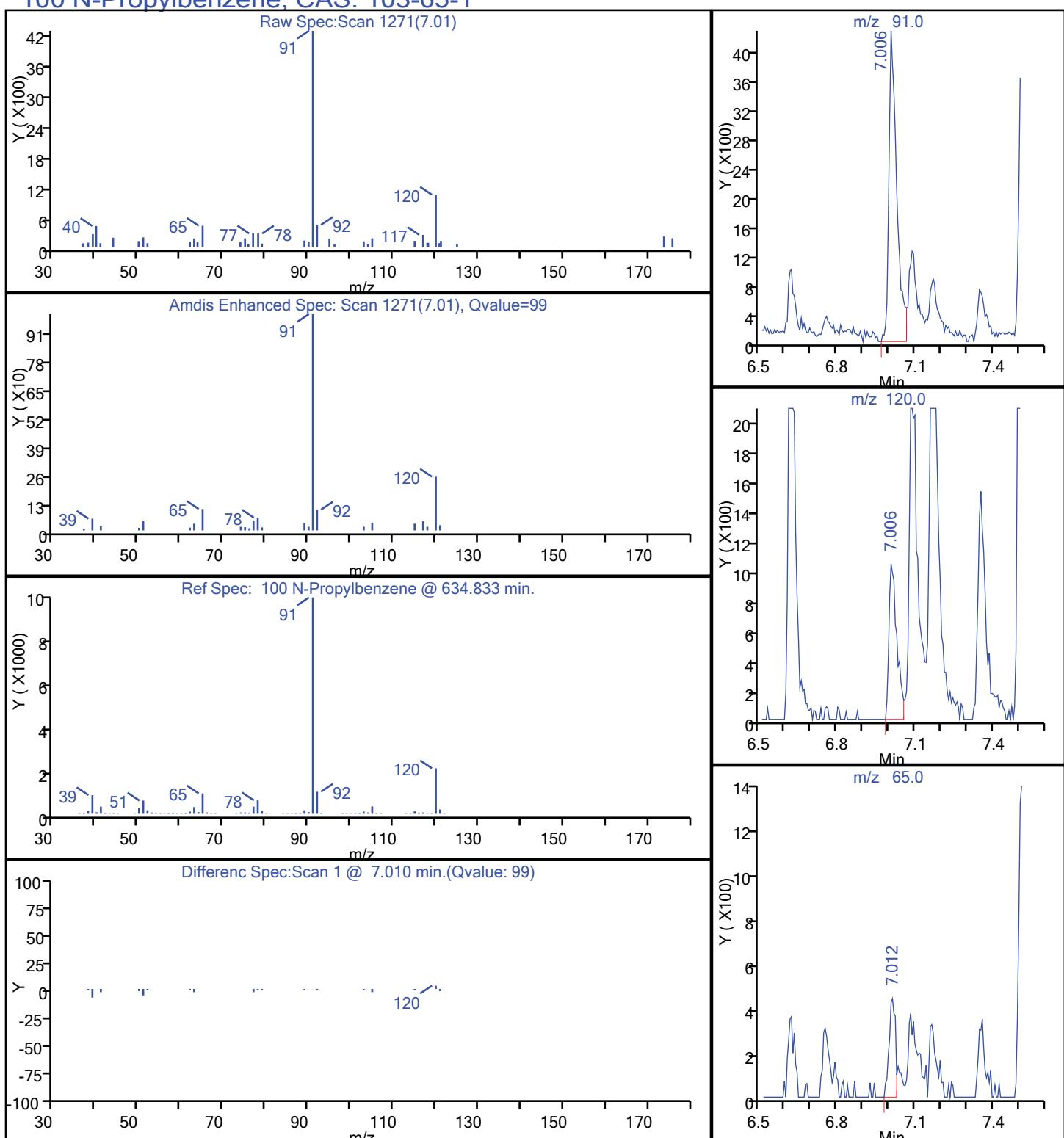
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

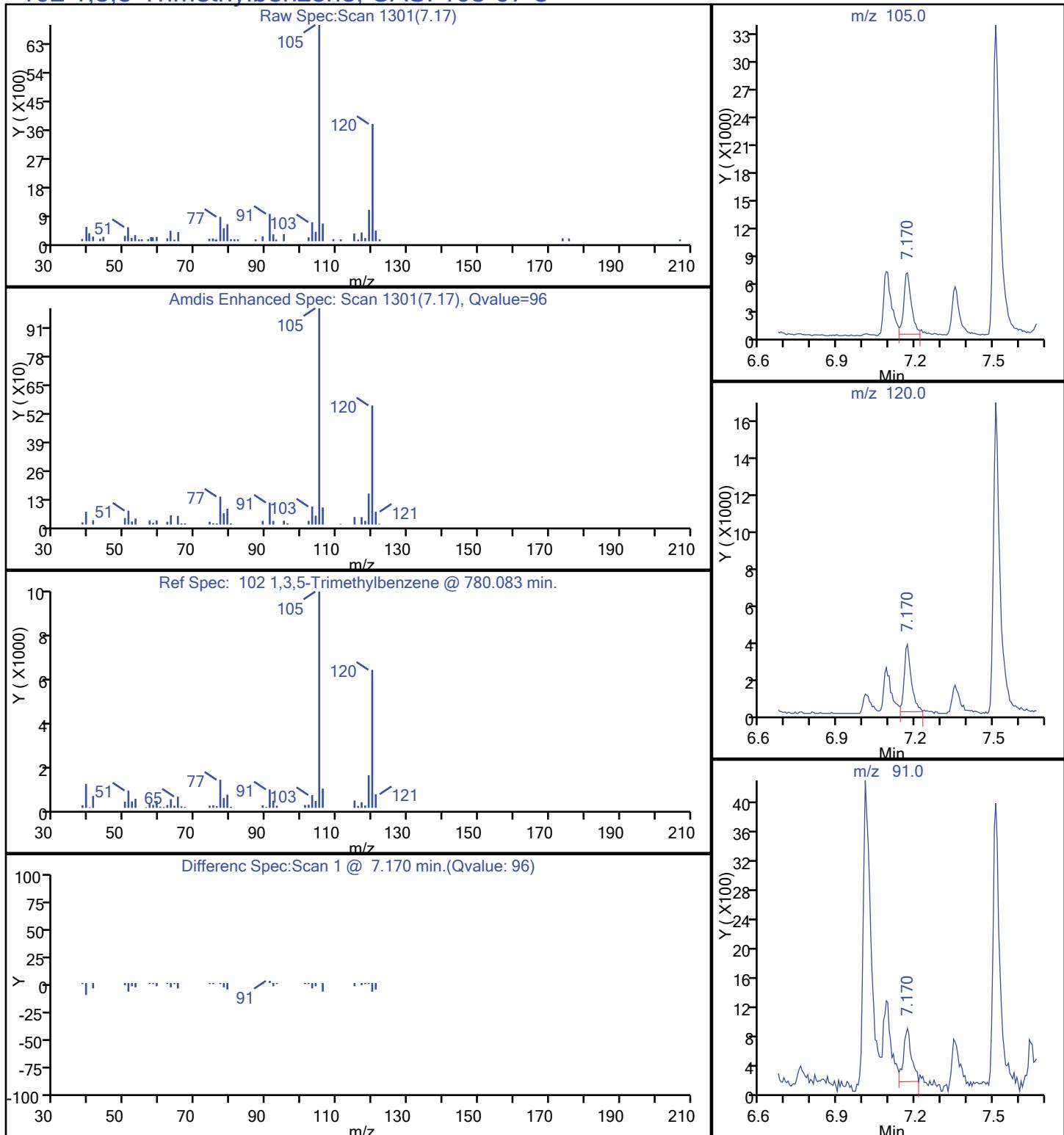
Column: Detector

MS SCAN

**100 N-Propylbenzene, CAS: 103-65-1**

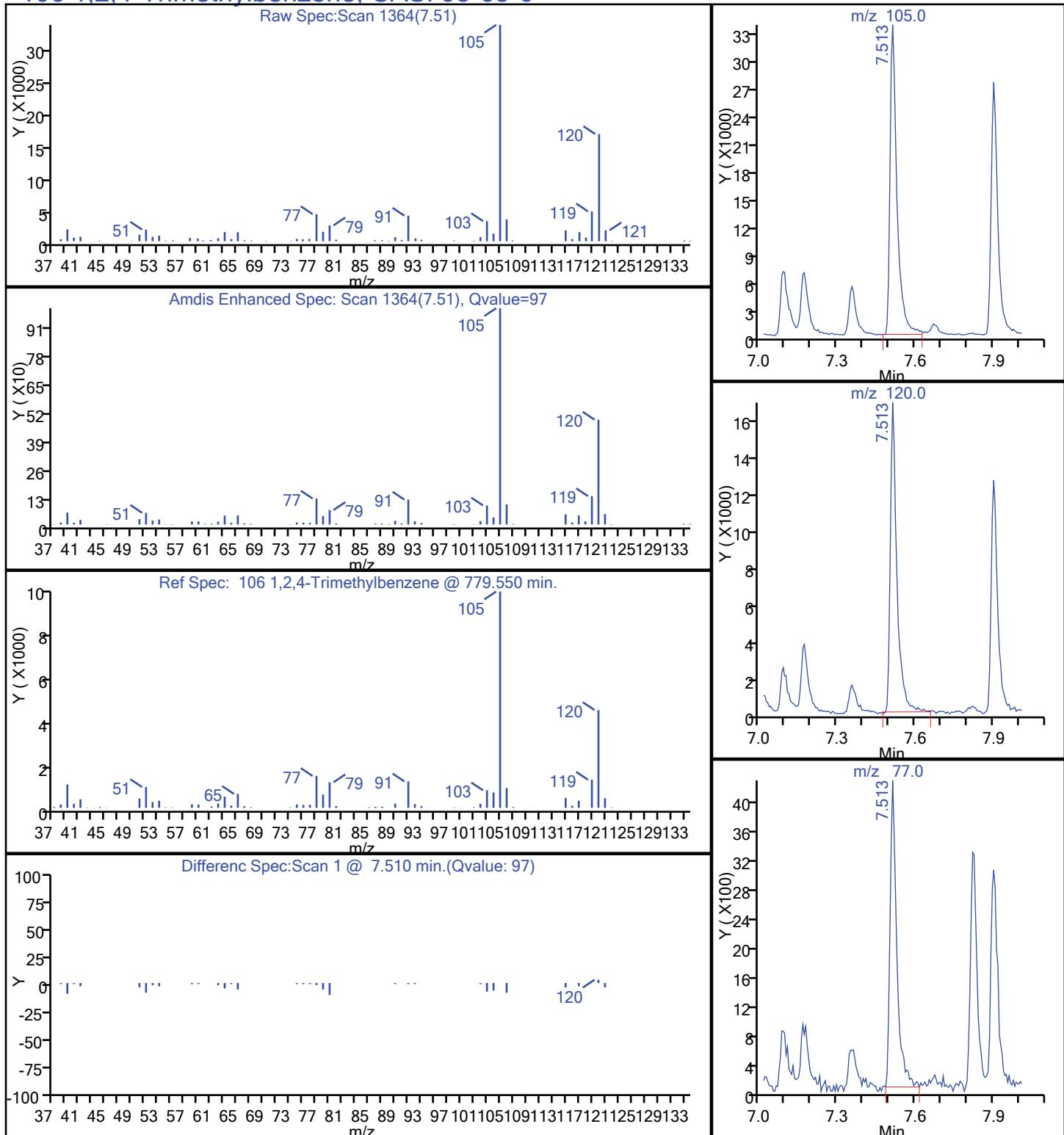
TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 102 1,3,5-Trimethylbenzene, CAS: 108-67-8



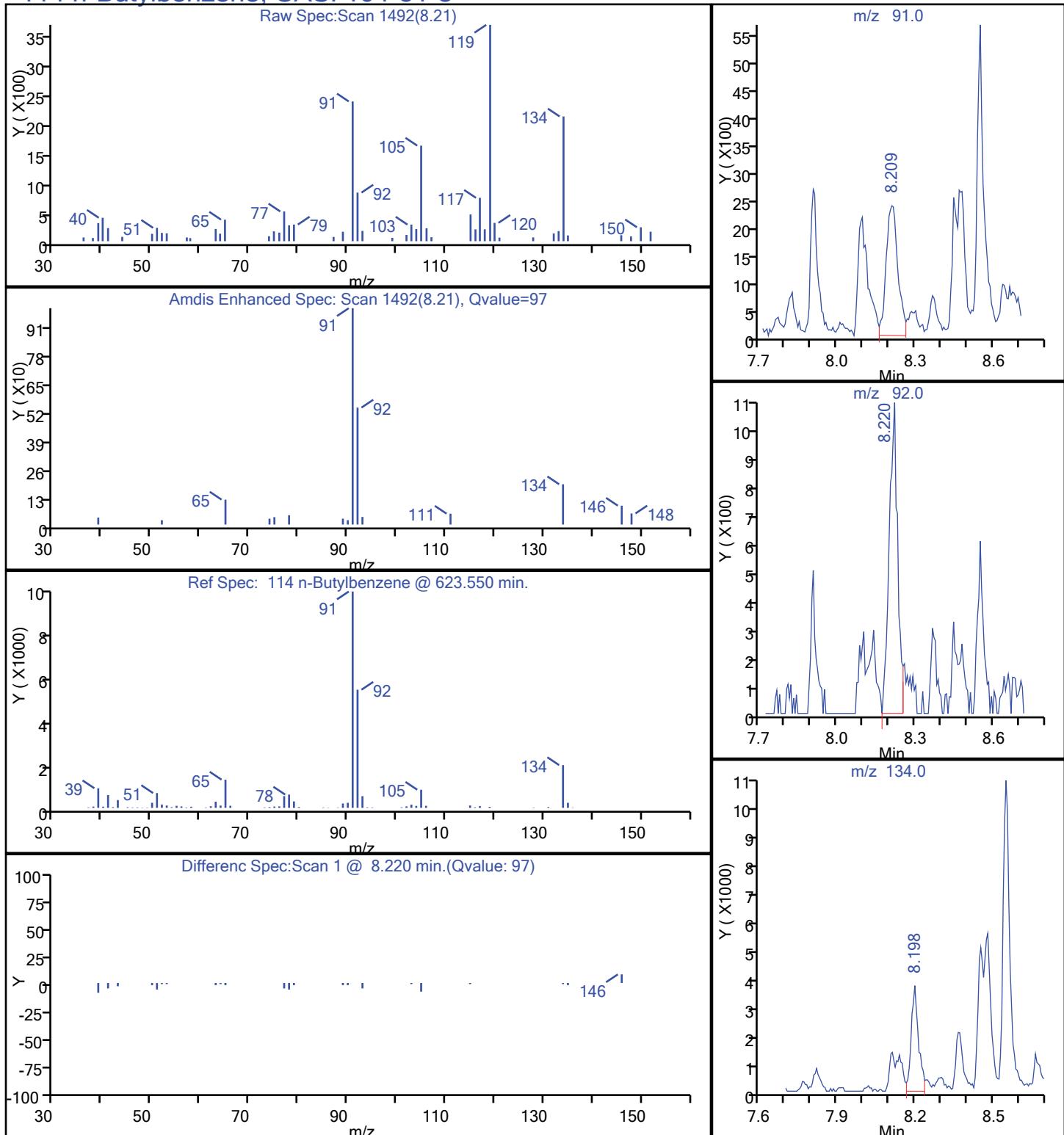
TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

### 106 1,2,4-Trimethylbenzene, CAS: 95-63-6



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

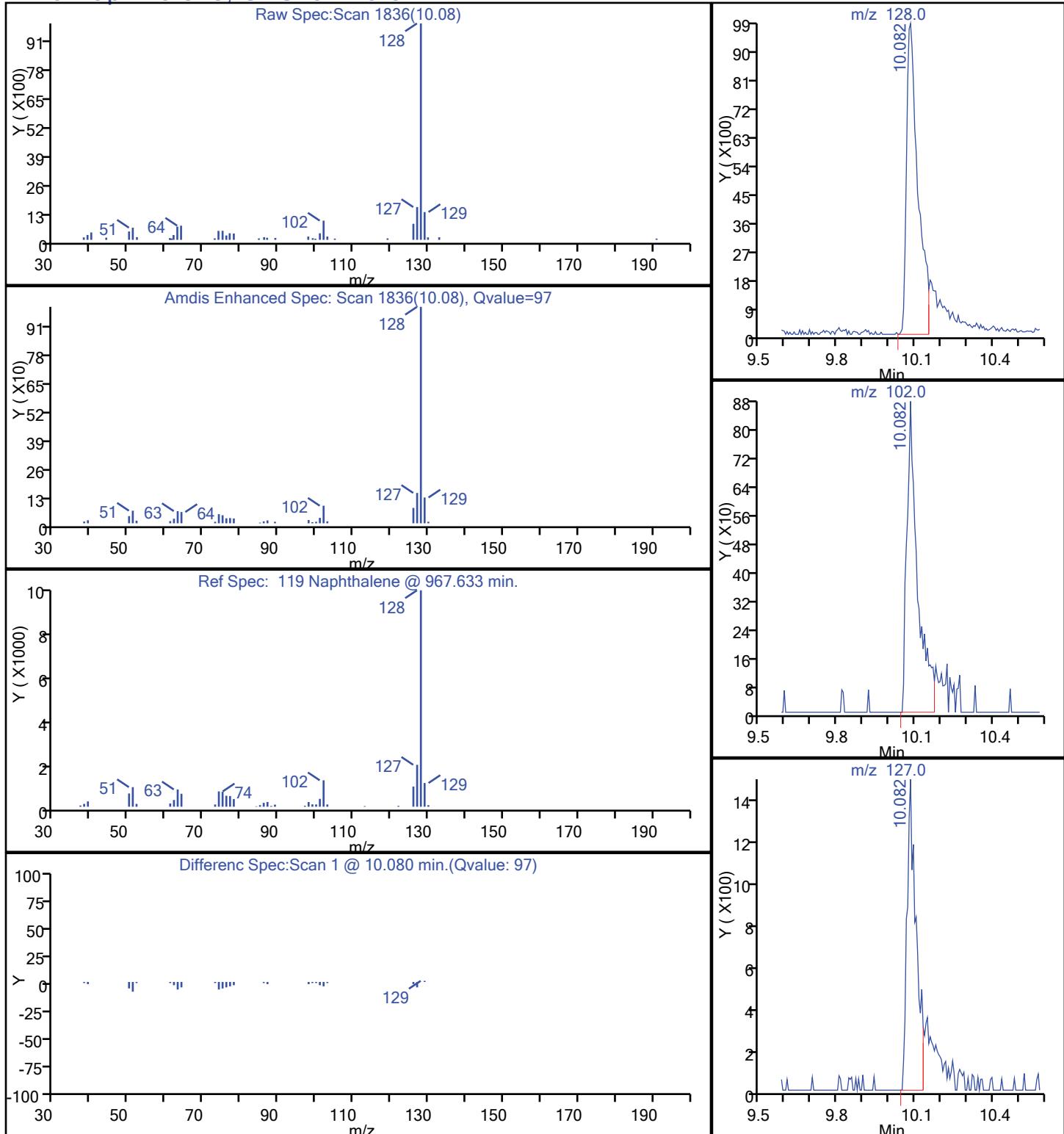
### 114 n-Butylbenzene, CAS: 104-51-8



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

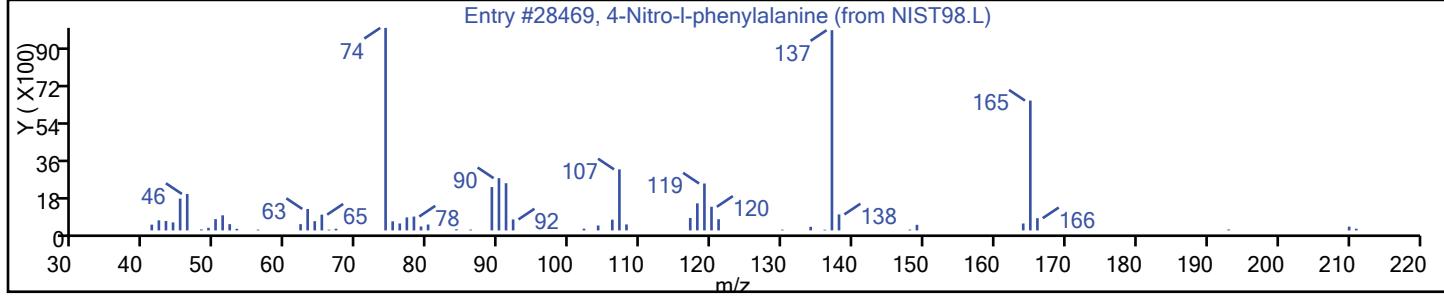
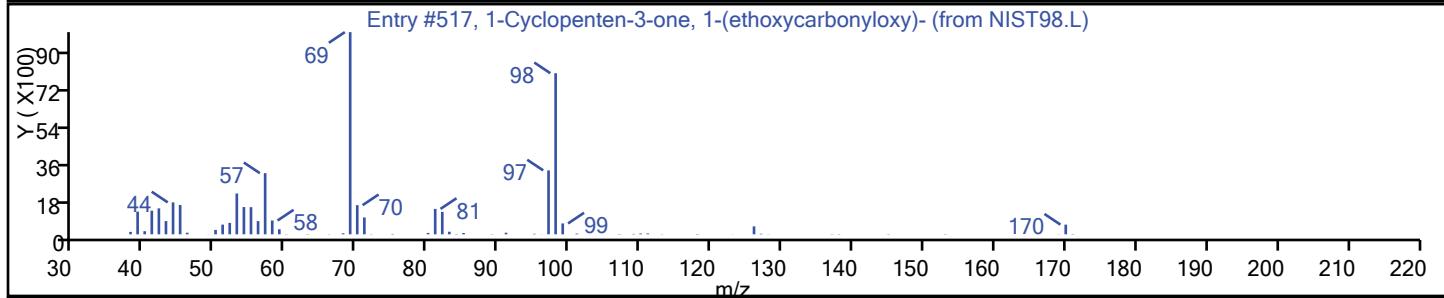
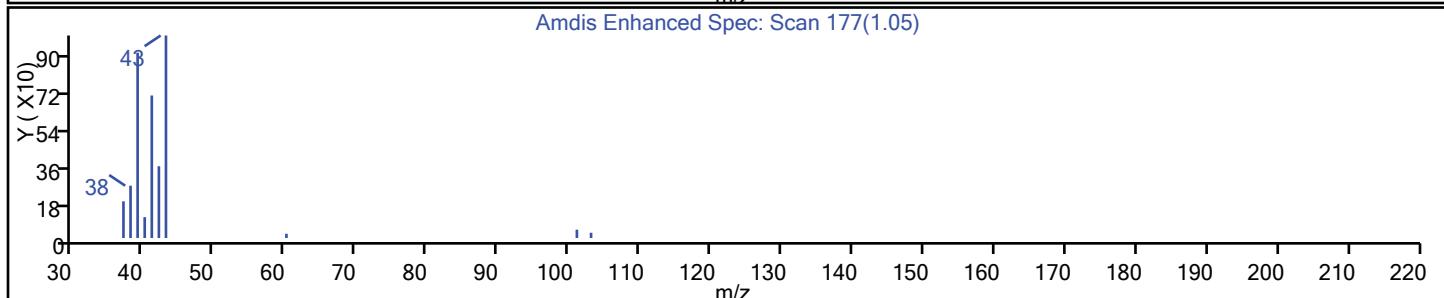
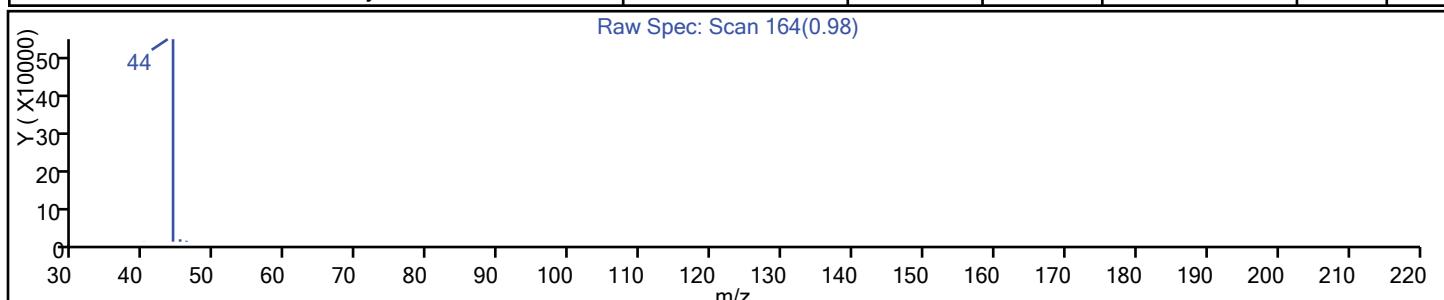
## 119 Naphthalene, CAS: 91-20-3



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
2-Butenal, (E)-	123-73-9	NIST98	517	C4H6O	70	64
Acetoacetic acid, 1-thio-, S-allyl ester	15780-65-1	NIST98.L	28469	C7H10O2S	158	64



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

Operator ID: EML

ALS Bottle#: 12 Worklist Smp#: 12

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

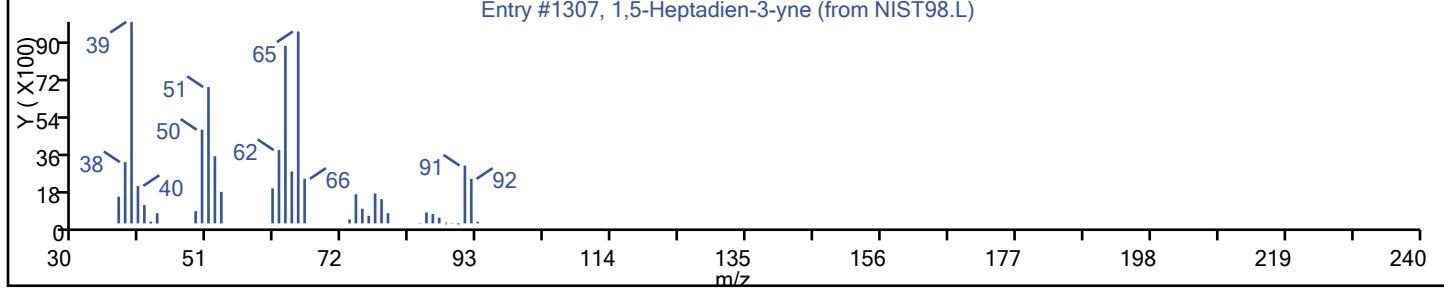
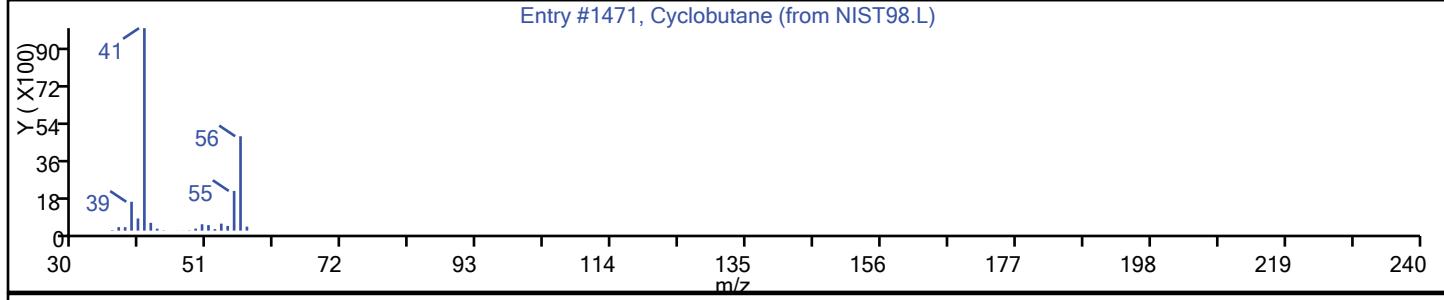
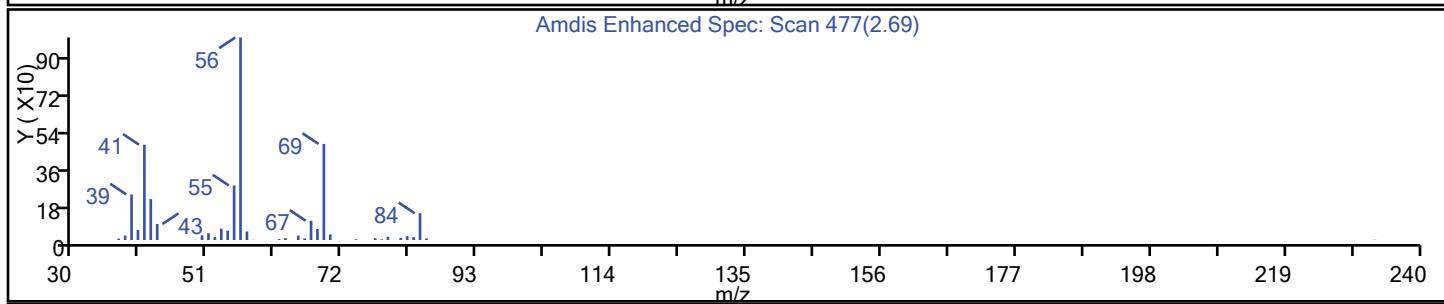
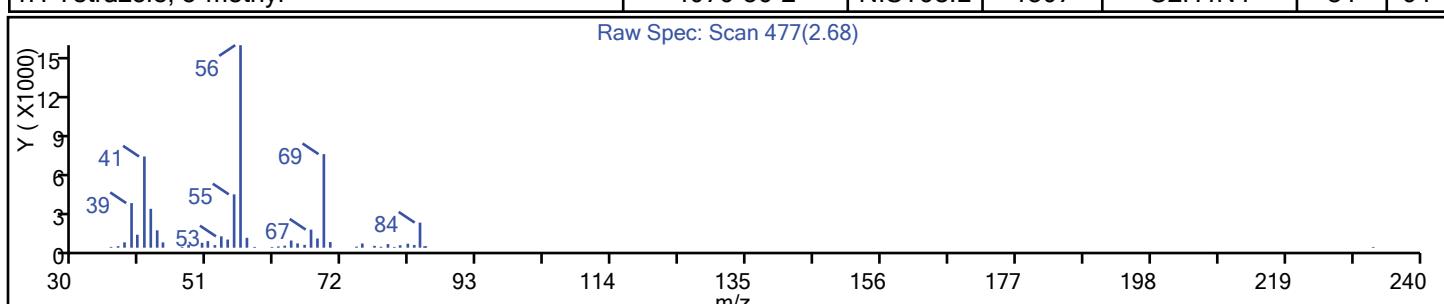
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

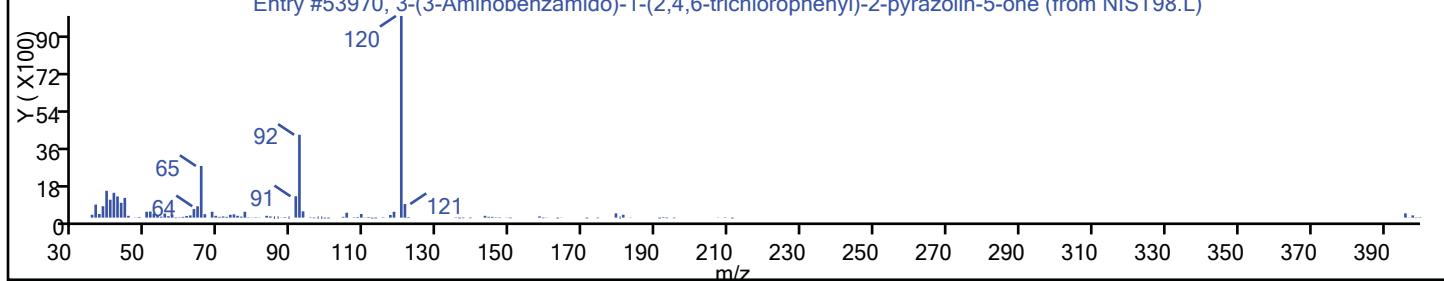
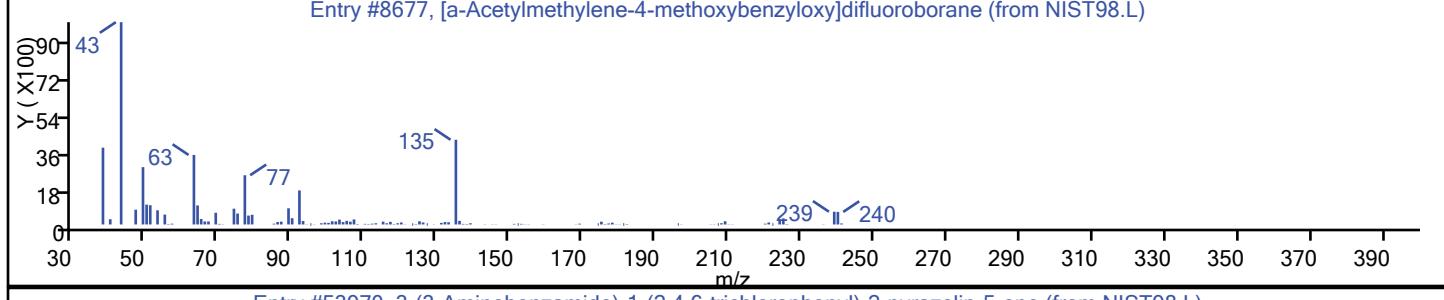
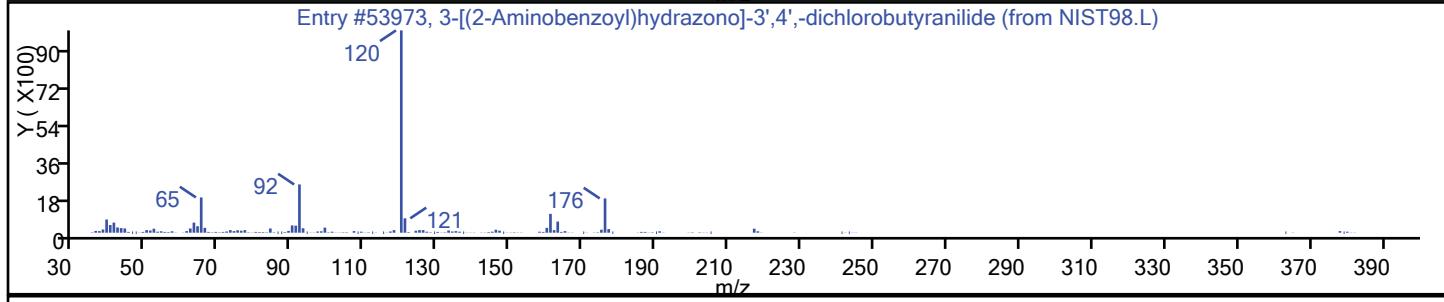
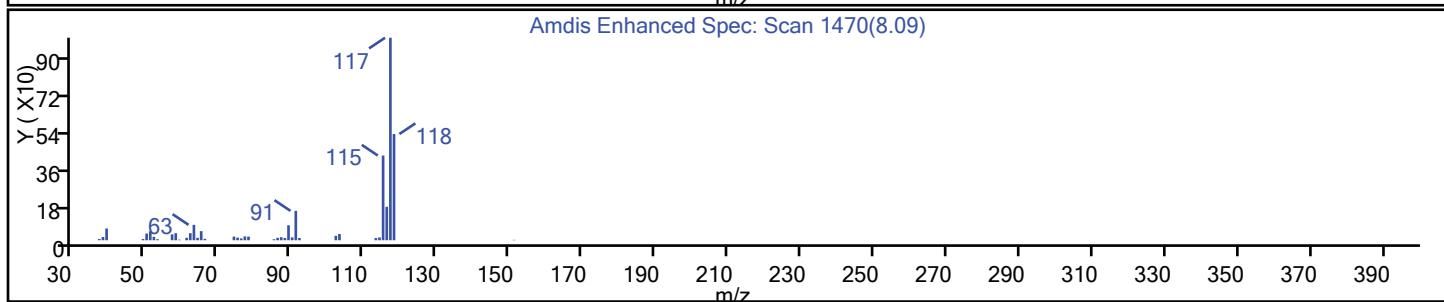
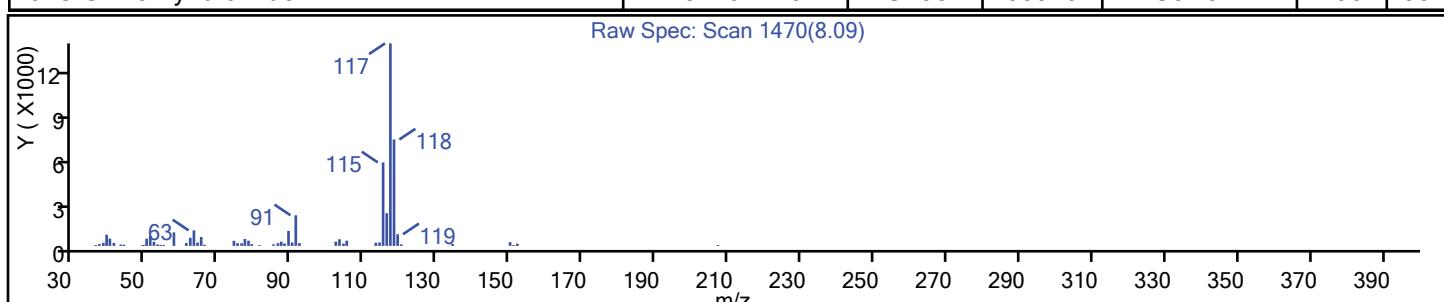
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Cyclopentane, methyl-	96-37-7	NIST98	1471	C6H12	84	91
1H-Tetrazole, 5-methyl-	4076-36-2	NIST98.L	1307	C2H4N4	84	64



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, (2-bromocyclopropyl)-	36617-02-4	NIST98	53973	C9H9Br	196	59
Deltacyclene	7785-10-6	NIST98.L	8677	C9H10	118	50
trans-Cinnamyl bromide	26146-77-0	NIST98.L	53970	C9H9Br	196	50



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D

Injection Date: 05-Jun-2015 16:04:30

Instrument ID: HP32

Lims ID: 490-79781-A-1

Lab Sample ID: 490-79781-1

Client ID: SC-01-060215

Operator ID: EML

ALS Bottle#: 12 Worklist Smp#: 12

Purge Vol: 10.000 mL

Dil. Factor: 1.0000

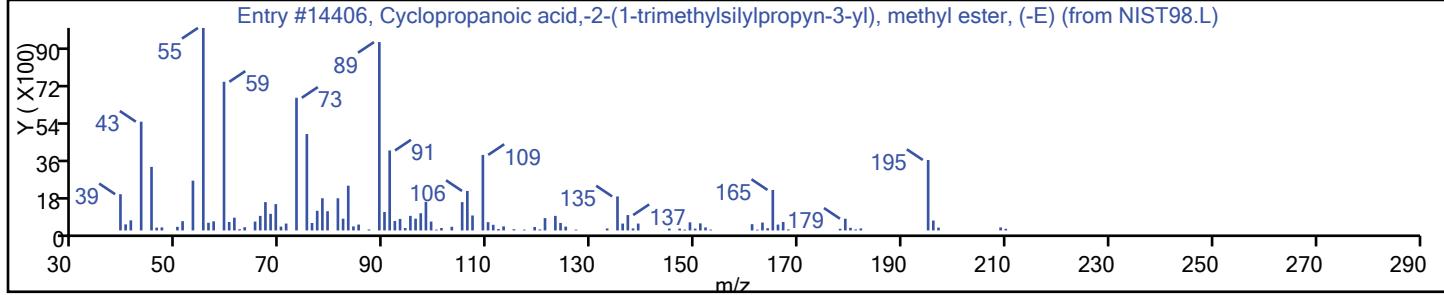
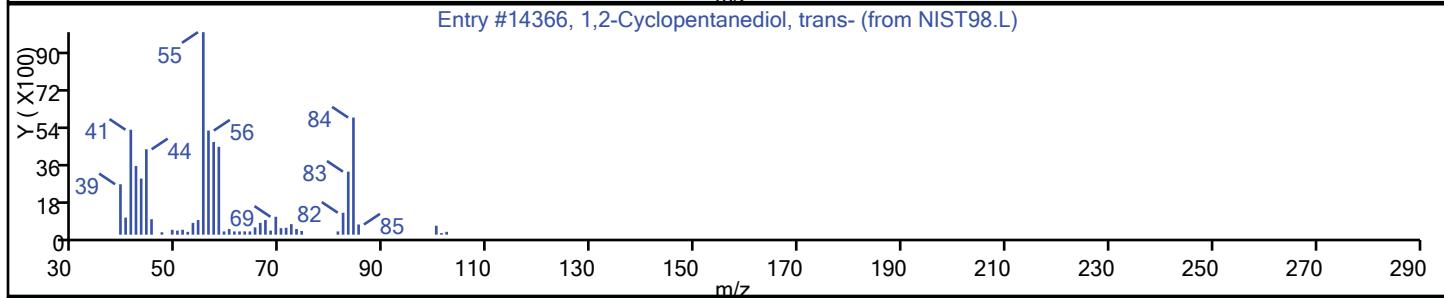
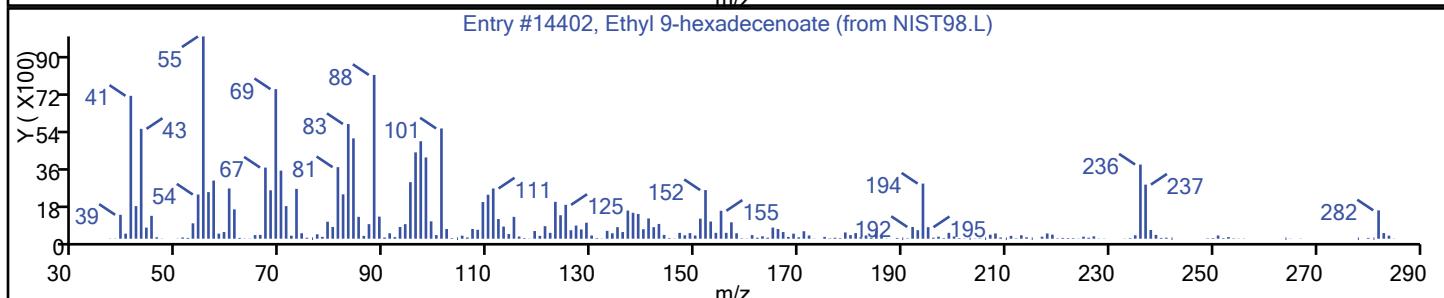
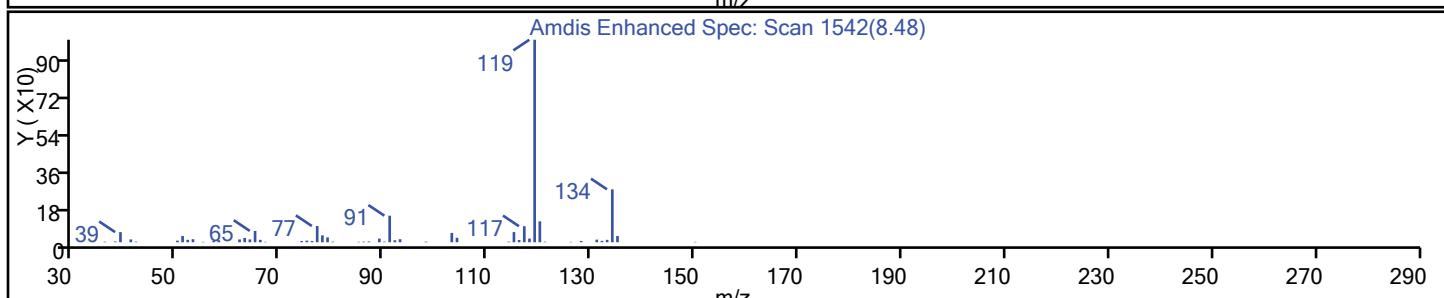
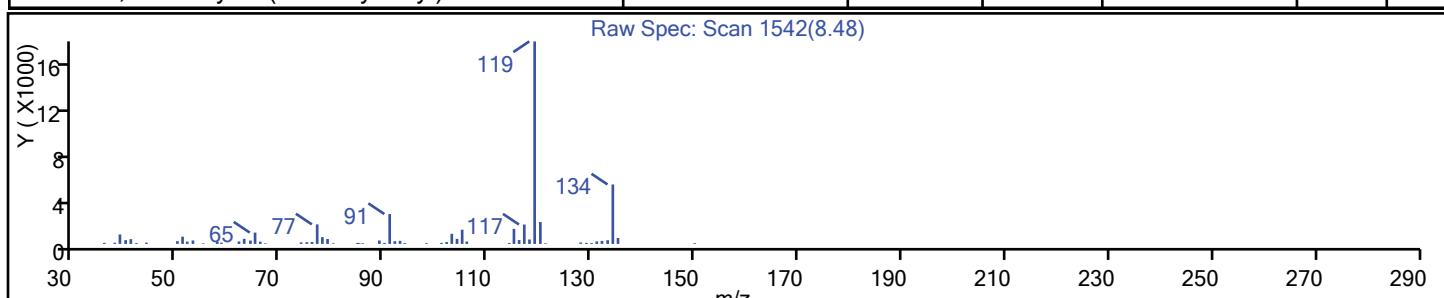
Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

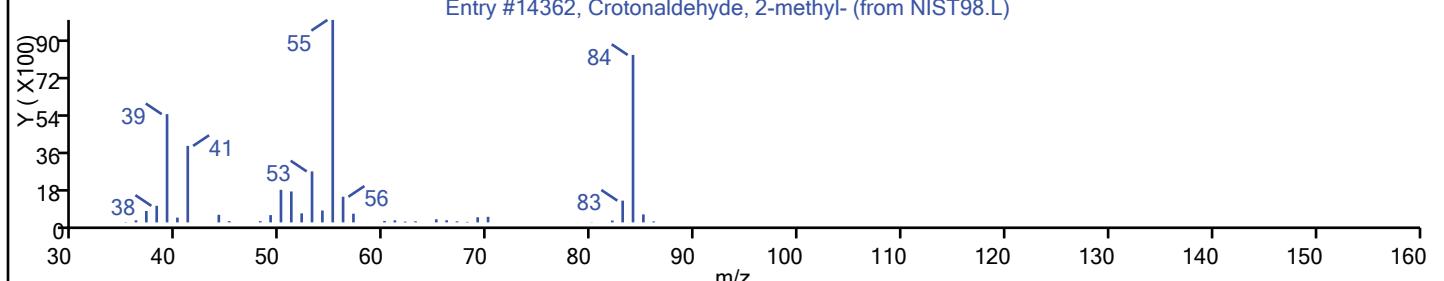
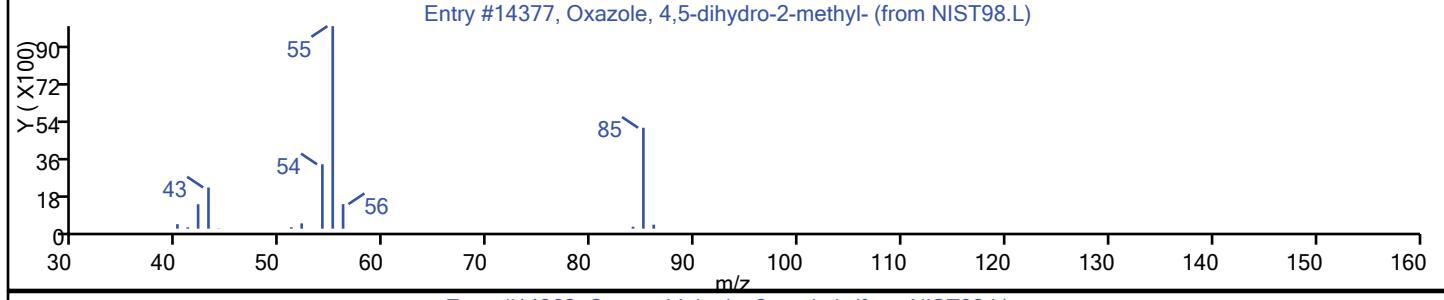
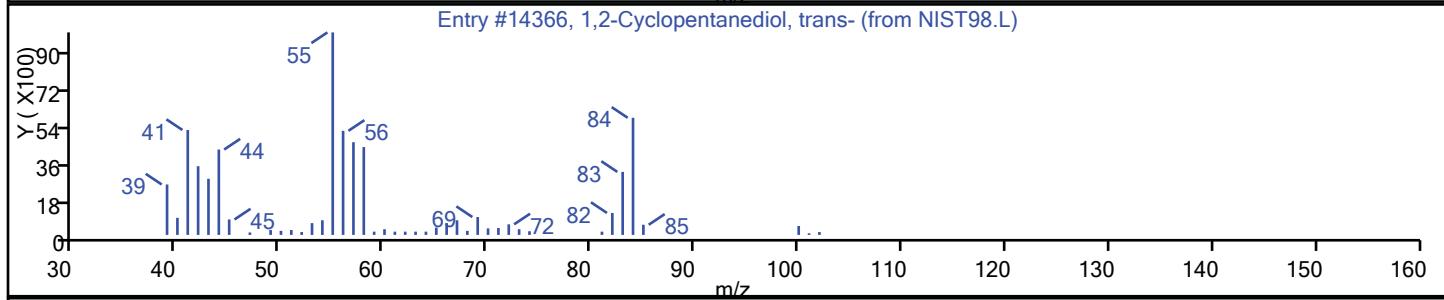
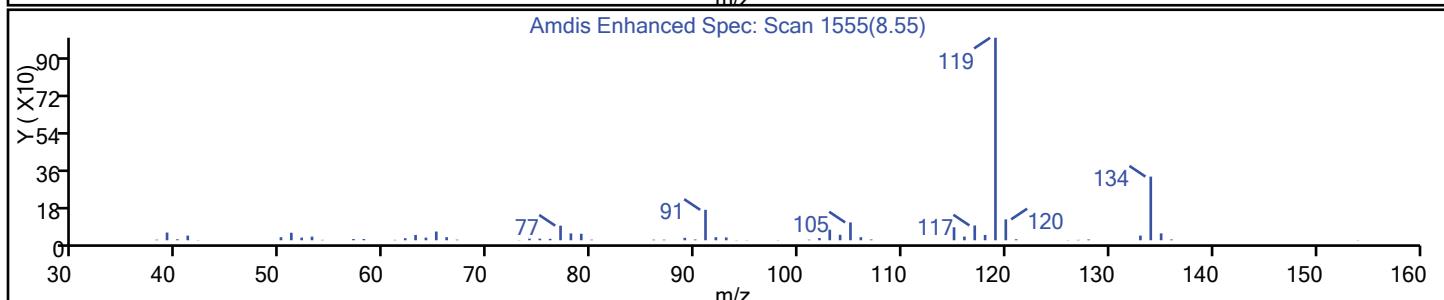
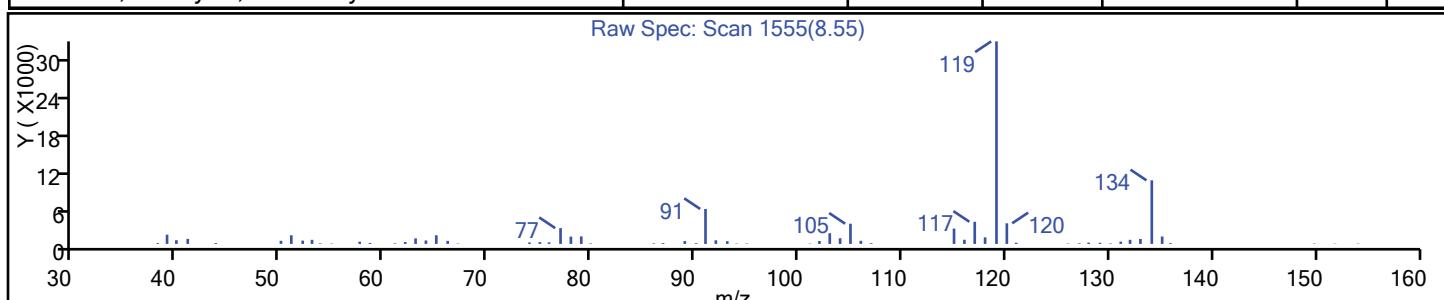
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST98	14402	C10H14	134	95
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98.L	14366	C10H14	134	94
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST98.L	14406	C10H14	134	93



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

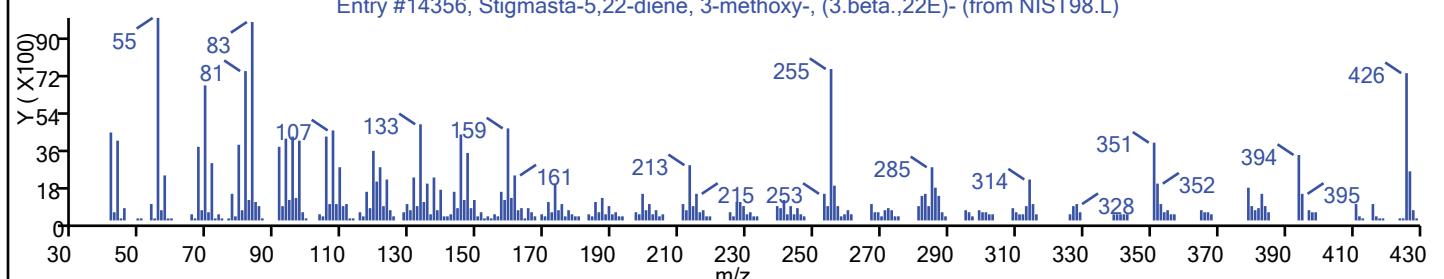
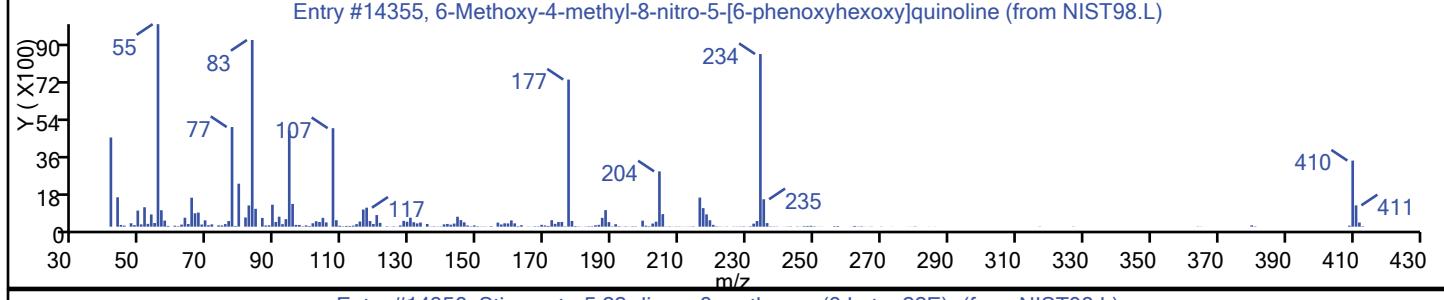
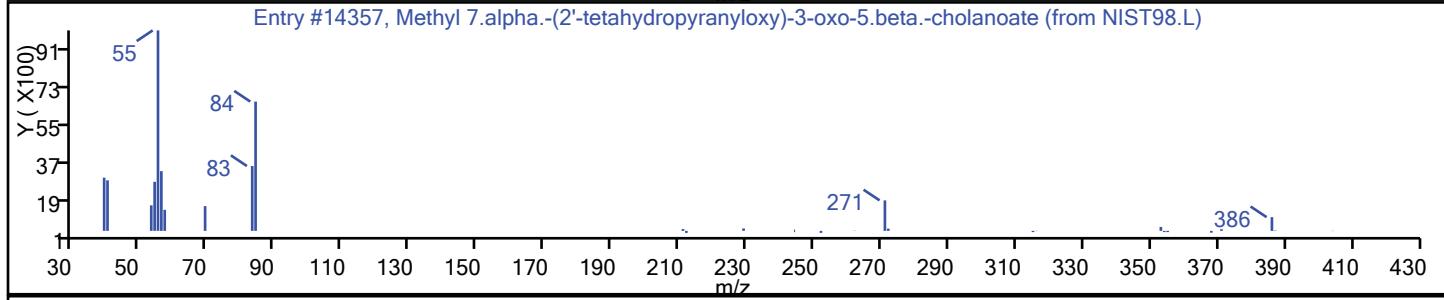
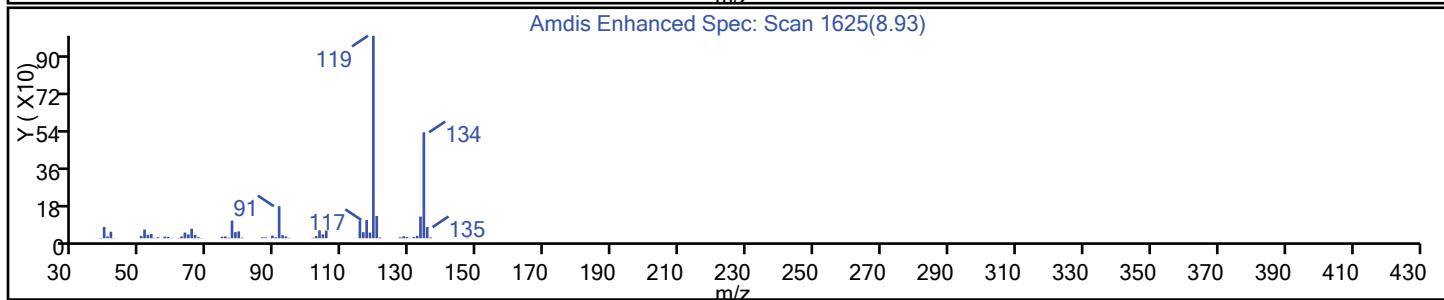
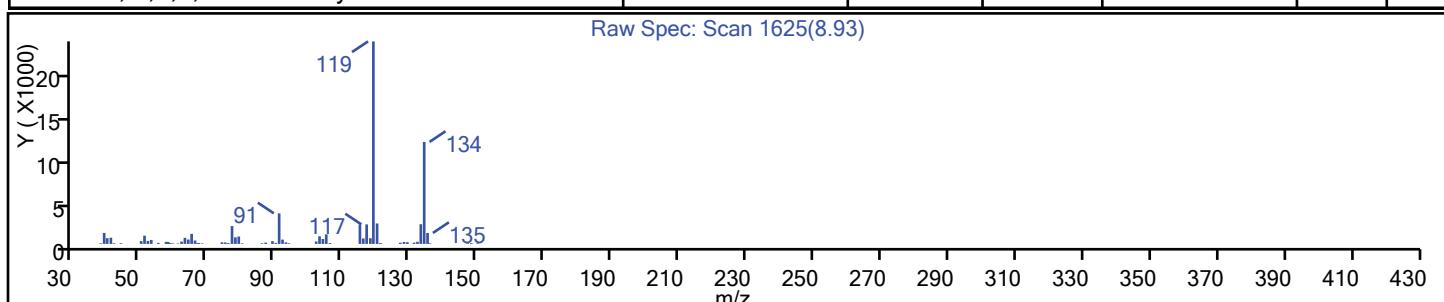
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98	14366	C10H14	134	97
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NIST98.L	14377	C10H14	134	96
Benzene, 2-ethyl-1,3-dimethyl-	2870-04-4	NIST98.L	14362	C10H14	134	95



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

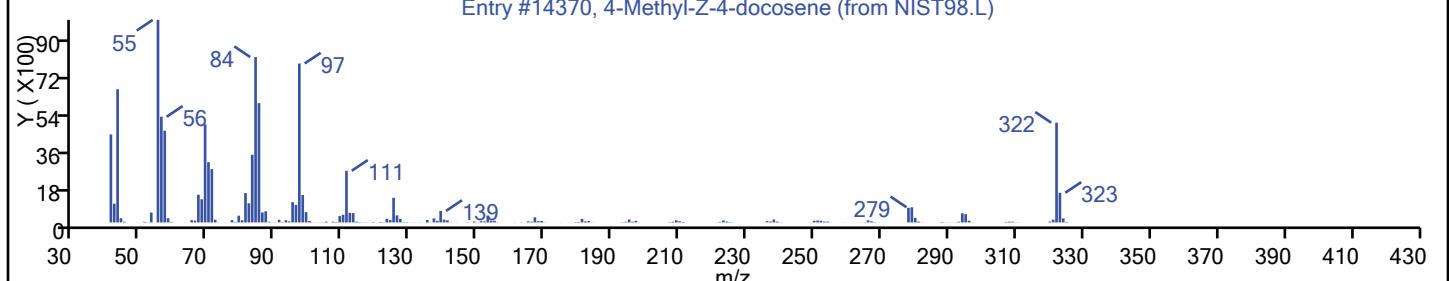
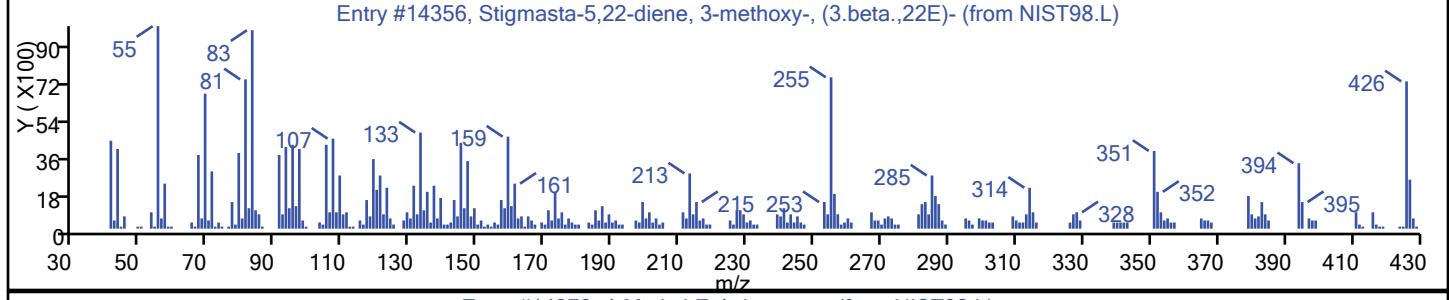
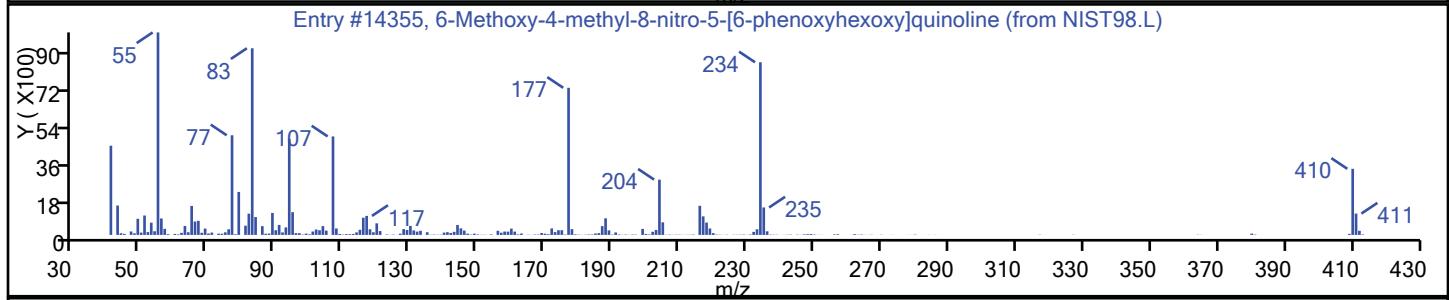
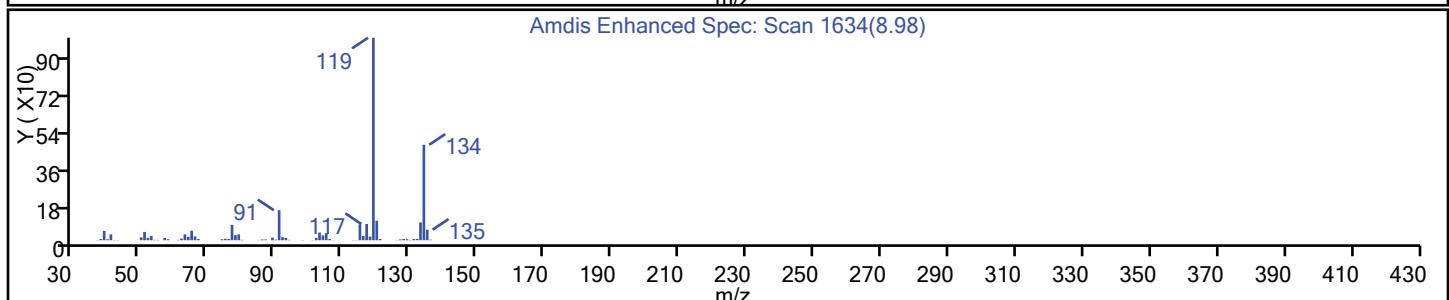
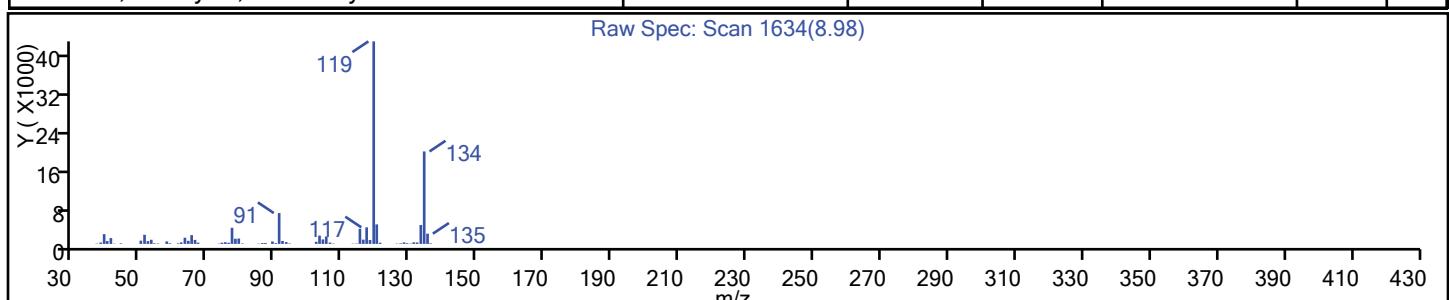
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98	14357	C10H14	134	97
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98.L	14355	C10H14	134	97
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98.L	14356	C10H14	134	96



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

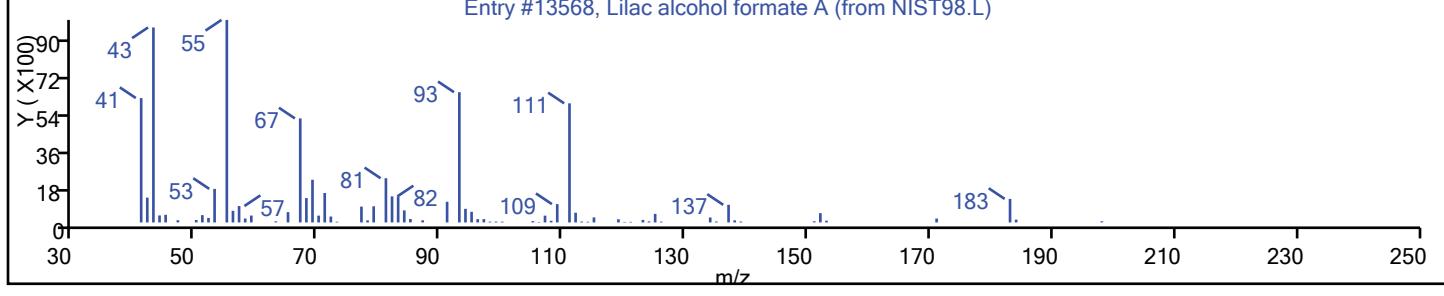
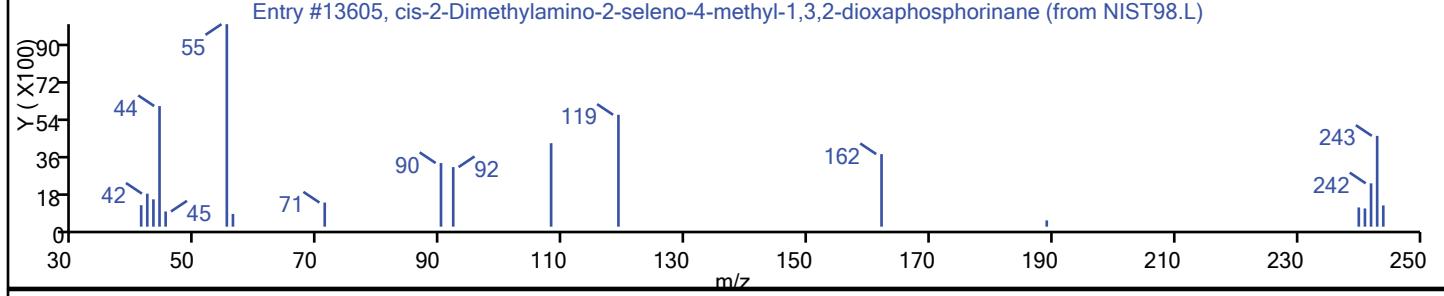
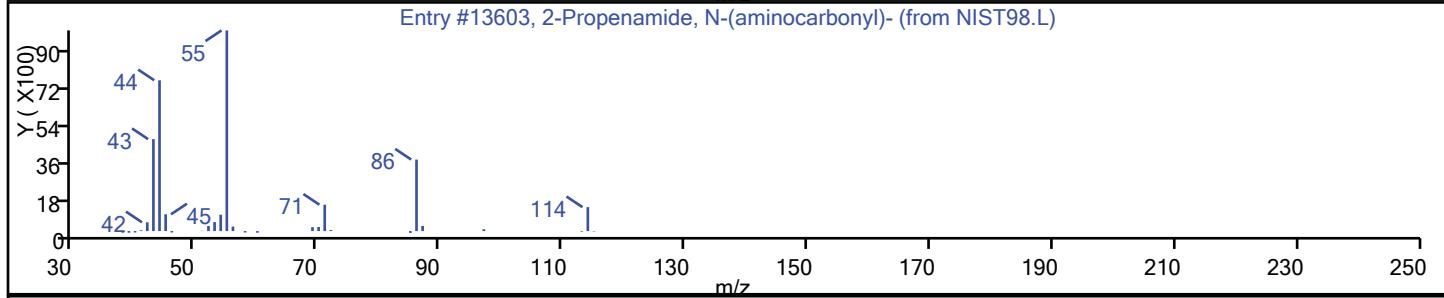
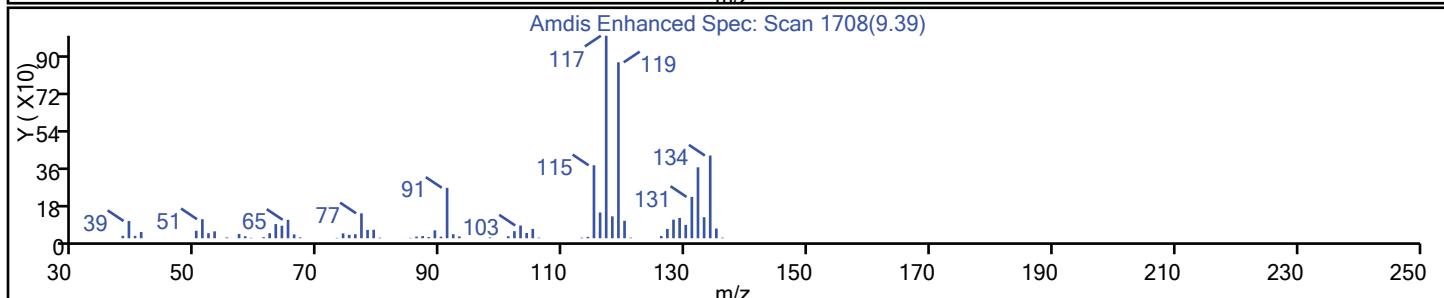
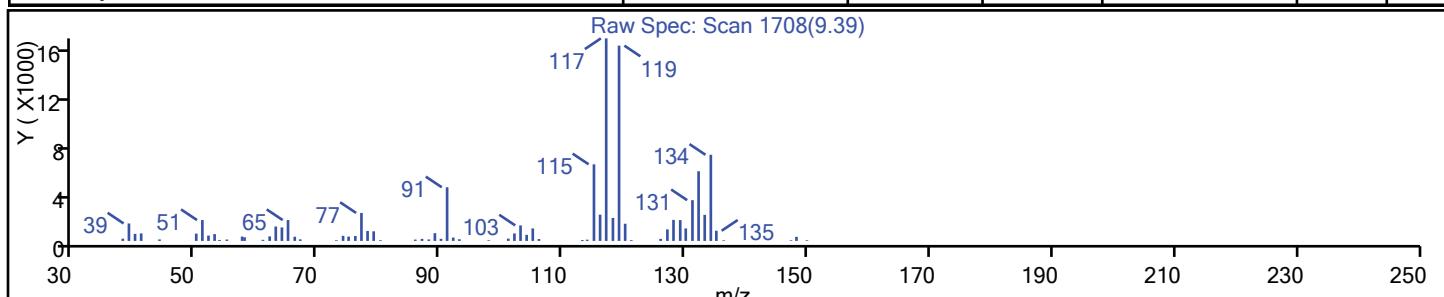
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98	14355	C10H14	134	97
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NIST98.L	14356	C10H14	134	97
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98.L	14370	C10H14	134	96



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-12.D  
 Injection Date: 05-Jun-2015 16:04:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-1 Lab Sample ID: 490-79781-1  
 Client ID: SC-01-060215  
 Operator ID: EML ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 2-ethenyl-1,4-dimethyl-	2039-89-6	NIST98	13603	C10H12	132	70
1H-Indene, 2,3-dihydro-5-methyl-	874-35-1	NIST98.L	13605	C10H12	132	50
3-Phenylbut-1-ene	934-10-1	NIST98.L	13568	C10H12	132	50



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-Pond-060215

Lab Sample ID: 490-79781-2

Matrix: Surface Water

Lab File ID: 060515-16.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 17:57

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-Pond-060215

Lab Sample ID: 490-79781-2

Matrix: Surface Water

Lab File ID: 060515-16.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:00

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 17:57

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		70-130
1868-53-7	Dibromofluoromethane (Surr)	111		70-130
2037-26-5	Toluene-d8 (Surr)	114		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: PMP-Pond-060215 Lab Sample ID: 490-79781-2  
Matrix: Surface Water Lab File ID: 060515-16.D  
Analysis Method: 8260C Date Collected: 06/02/2015 09:00  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 17:57  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-16.D  
 Lims ID: 490-79781-A-2 Lab Sample ID: 490-79781-2  
 Client ID: PMP-Pond-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 17:57:30 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-2  
 Misc. Info.: 490-0056059-016  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:12:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.447	0.003	99	358800	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.711	0.003	84	249996	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.826	7.823	0.003	94	123805	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.028	-0.003	94	95486	27.6	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.240	-0.003	0	84451	27.7	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.552	0.003	93	354438	28.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.754	6.751	0.003	95	98337	26.9	
23 Acetone	58	1.844	1.846	-0.002	66	395	1.85	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-16.D  
 Lims ID: 490-79781-A-2 Lab Sample ID: 490-79781-2  
 Client ID: PMP-Pond-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 17:57:30 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-2  
 Misc. Info.: 490-0056059-016  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:12:37

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.754 98337

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:41

Chrom Revision: 2.2 14-May-2015 11:41:56

TestAmerica Nashville

\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-16.D

Instrument ID: HP32

Lims ID: 490-79781-A-2

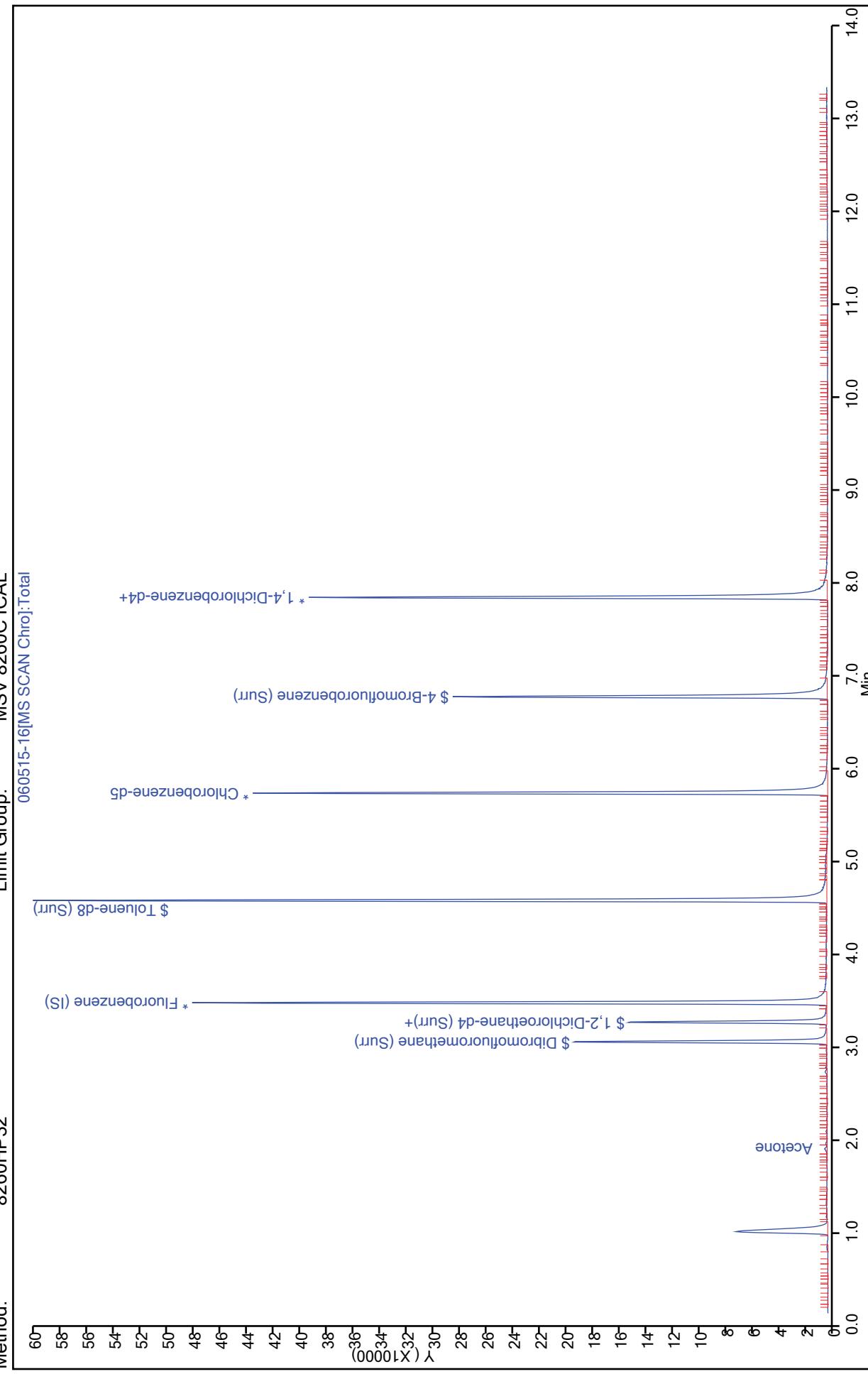
Client ID: RMP-Pond-060215

Purge Vol: 10.000 mL

Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 16

ALS Bottle#: 16



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: RW-6-060215

Lab Sample ID: 490-79781-3

Matrix: Ground Water

Lab File ID: 060515-17.D

Analysis Method: 8260C

Date Collected: 06/02/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 18:25

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	1.7		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	1.4		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.14	J	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.34	J	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: RW-6-060215

Lab Sample ID: 490-79781-3

Matrix: Ground Water

Lab File ID: 060515-17.D

Analysis Method: 8260C

Date Collected: 06/02/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 18:25

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.37	J	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	113		70-130
1868-53-7	Dibromofluoromethane (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	117		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Client Sample ID: RW-6-060215 Lab Sample ID: 490-79781-3  
Matrix: Ground Water Lab File ID: 060515-17.D  
Analysis Method: 8260C Date Collected: 06/02/2015 10:50  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 18:25  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L  
Number TICs Found: 1 TIC Result Total: 0.14

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		0.14	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-17.D  
 Lims ID: 490-79781-A-3 Lab Sample ID: 490-79781-3  
 Client ID: RW-6-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 18:25:30 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-3  
 Misc. Info.: 490-0056059-017  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:14:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	-0.001	99	403171	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	265316	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	93	122465	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.028	-0.001	94	96506	24.9	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	83404	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	386420	29.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	96	101910	28.1	
15 Chloroethane	64	1.427	1.427	0.000	98	4848	1.40	
23 Acetone	58	1.852	1.846	0.006	68	184	0.1091	
35 Methyl tert-butyl ether	73	2.205	2.195	0.010	58	463	0.0548	
37 1,1-Dichloroethane	63	2.423	2.423	0.000	96	2544	0.3364	
42 cis-1,2-Dichloroethene	61	2.750	2.745	0.005	18	513	0.0765	
53 Cyclohexane	56	3.076	3.077	-0.001	89	1015	0.1378	
57 Benzene	78	3.278	3.273	0.005	94	30209	1.65	
76 Toluene	91	4.611	4.606	0.005	98	6739	0.3738	
89 Ethylbenzene	91	5.853	5.831	0.021	94	1288	0.0714	
90 m-Xylene & p-Xylene	91	5.961	5.934	0.027	0	3032	0.2149	
91 o-Xylene	91	6.315	6.277	0.038	90	942	0.0672	
110 1,4-Dichlorobenzene	146	7.850	7.845	0.005	42	441	0.0580	
S 134 Xylenes, Total	1				0		0.2820	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-17.D  
 Lims ID: 490-79781-A-3 Lab Sample ID: 490-79781-3  
 Client ID: RW-6-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 18:25:30 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-3  
 Misc. Info.: 490-0056059-017  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:14:27

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Isopropyl alcohol	1.922	1577	16.2	
2-Methyl-2-propanol	2.107	286	1.97	
BFB	6.751	101910		

**Reagents:**

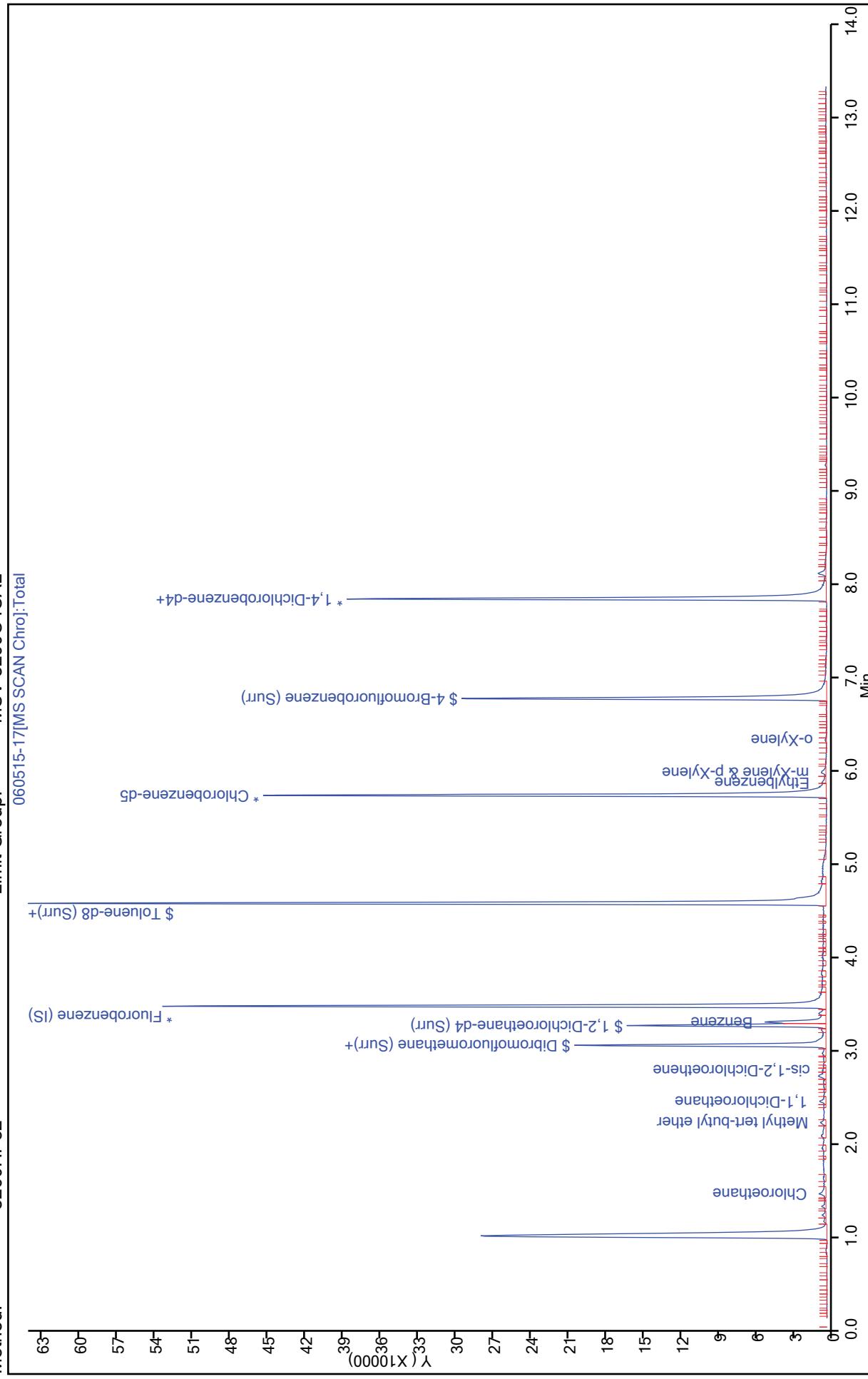
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:45

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D  
Injection Date: 05-Jun-2015 18:25:30  
Lims ID: 490-79781-A-3  
Client ID: RW-6-0660215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 17  
Instrument ID: HP32  
Lab Sample ID: 490-79781-3  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D

Injection Date: 05-Jun-2015 18:25:30

Instrument ID: HP32

Lims ID: 490-79781-A-3

Lab Sample ID: 490-79781-3

Client ID: RW-6-060215

ALS Bottle#: 17 Worklist Smp#: 17

Operator ID: EML

Dil. Factor: 1.0000

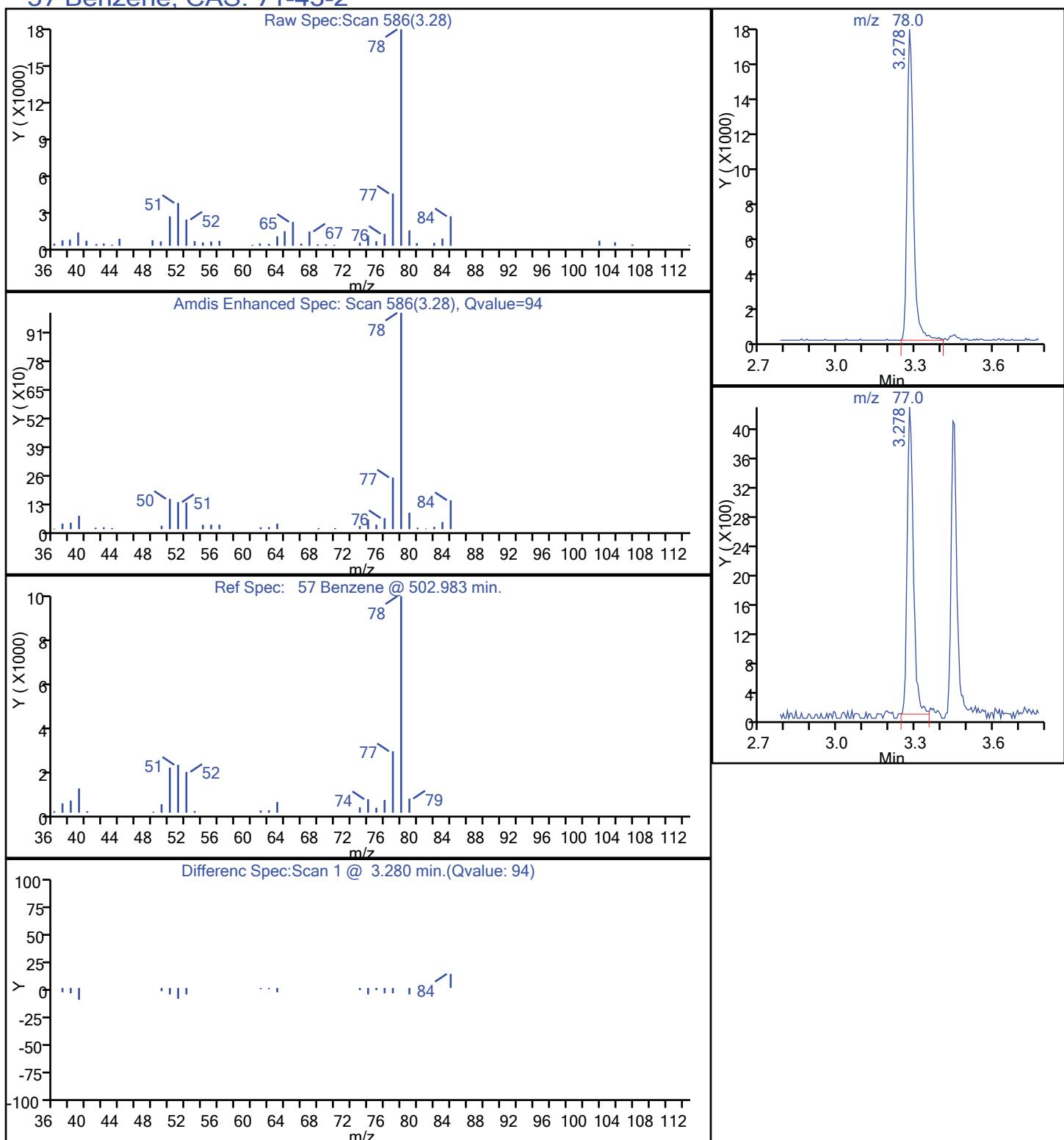
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

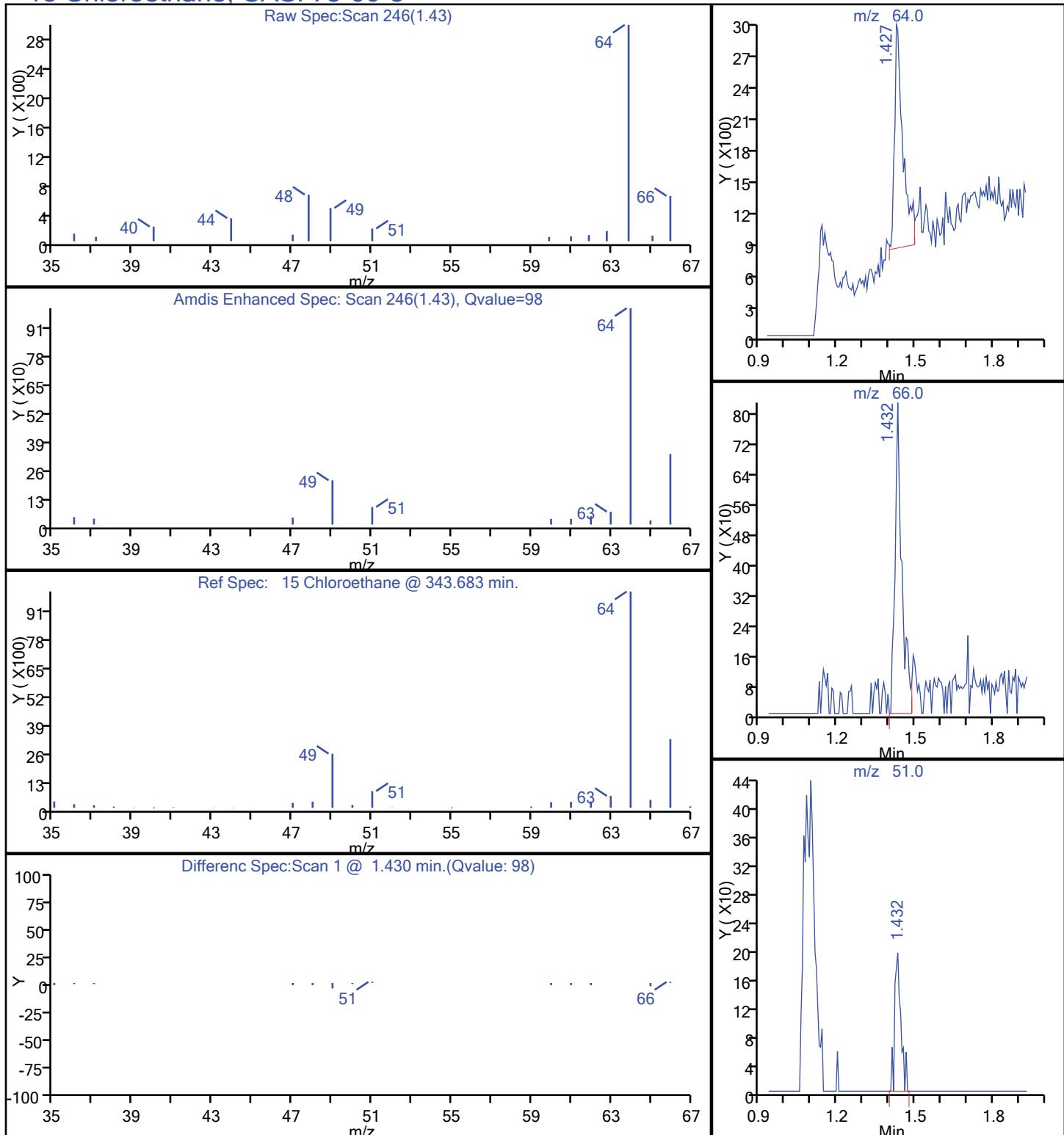
Column:

**57 Benzene, CAS: 71-43-2**

## TestAmerica Nashville

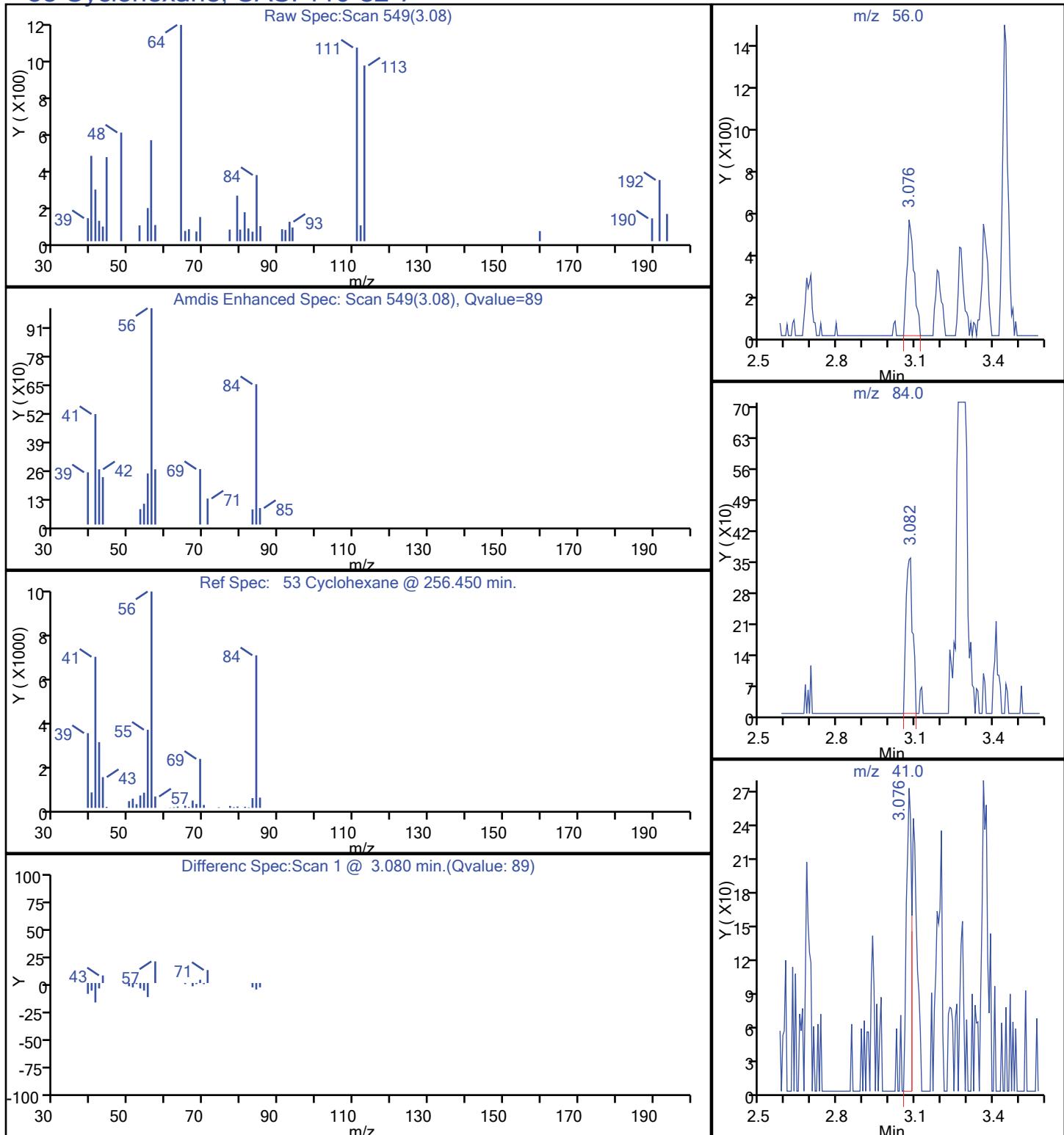
Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D  
 Injection Date: 05-Jun-2015 18:25:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-3 Lab Sample ID: 490-79781-3  
 Client ID: RW-6-060215  
 Operator ID: EML ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 15 Chloroethane, CAS: 75-00-3



TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D  
 Injection Date: 05-Jun-2015 18:25:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-3 Lab Sample ID: 490-79781-3  
 Client ID: RW-6-060215  
 Operator ID: EML ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 53 Cyclohexane, CAS: 110-82-7



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D

Injection Date: 05-Jun-2015 18:25:30

Instrument ID: HP32

Lims ID: 490-79781-A-3

Lab Sample ID: 490-79781-3

Client ID: RW-6-060215

Operator ID: EML

ALS Bottle#: 17 Worklist Smp#: 17

Purge Vol: 10.000 mL

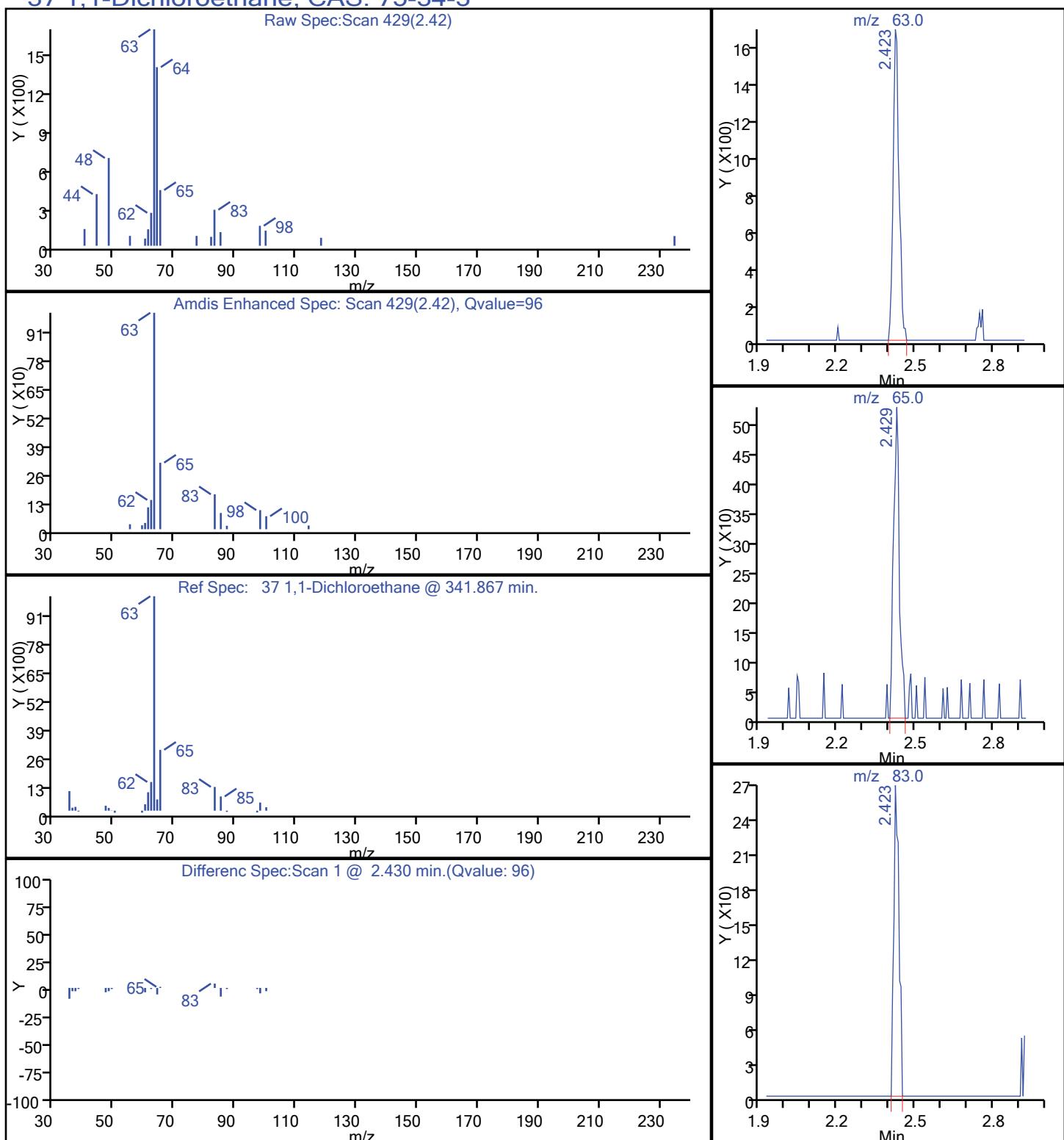
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

**37 1,1-Dichloroethane, CAS: 75-34-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-17.D

Injection Date: 05-Jun-2015 18:25:30

Instrument ID: HP32

Lims ID: 490-79781-A-3

Lab Sample ID: 490-79781-3

Client ID: RW-6-060215

Operator ID: EML

ALS Bottle#: 17 Worklist Smp#: 17

Purge Vol: 10.000 mL

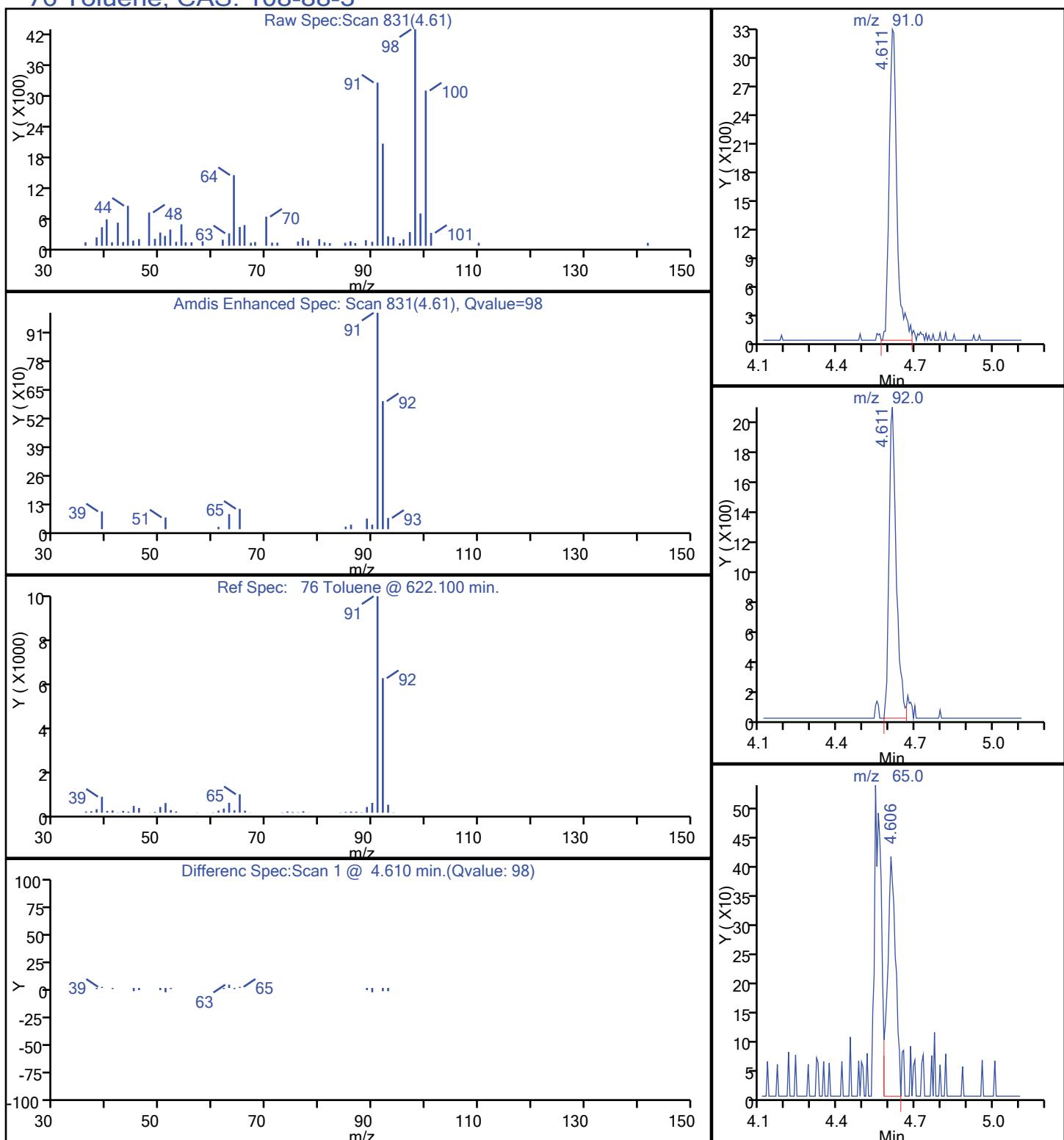
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**76 Toluene, CAS: 108-88-3**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-50-060215

Lab Sample ID: 490-79781-4

Matrix: Ground Water

Lab File ID: 060515-18.D

Analysis Method: 8260C

Date Collected: 06/02/2015 13:05

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 18:53

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-50-060215 Lab Sample ID: 490-79781-4

Matrix: Ground Water Lab File ID: 060515-18.D

Analysis Method: 8260C Date Collected: 06/02/2015 13:05

Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 18:53

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 253850 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		70-130
1868-53-7	Dibromofluoromethane (Surr)	104		70-130
2037-26-5	Toluene-d8 (Surr)	114		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: PMP-50-060215 Lab Sample ID: 490-79781-4  
Matrix: Ground Water Lab File ID: 060515-18.D  
Analysis Method: 8260C Date Collected: 06/02/2015 13:05  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 18:53  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-18.D  
 Lims ID: 490-79781-A-4 Lab Sample ID: 490-79781-4  
 Client ID: PMP-50-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 18:53:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-4  
 Misc. Info.: 490-0056059-018  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:15:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.447	0.001	99	354329	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	248296	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.825	7.823	0.002	94	120792	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.028	0.001	94	89021	26.1	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.240	0.001	0	78685	26.2	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.552	0.001	92	353244	28.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.751	0.001	96	96080	26.9	
76 Toluene	91	4.613	4.606	0.007	98	2416	0.1432	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-18.D  
 Lims ID: 490-79781-A-4 Lab Sample ID: 490-79781-4  
 Client ID: PMP-50-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 18:53:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-4  
 Misc. Info.: 490-0056059-018  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:15:15

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.752 95806

**Reagents:**

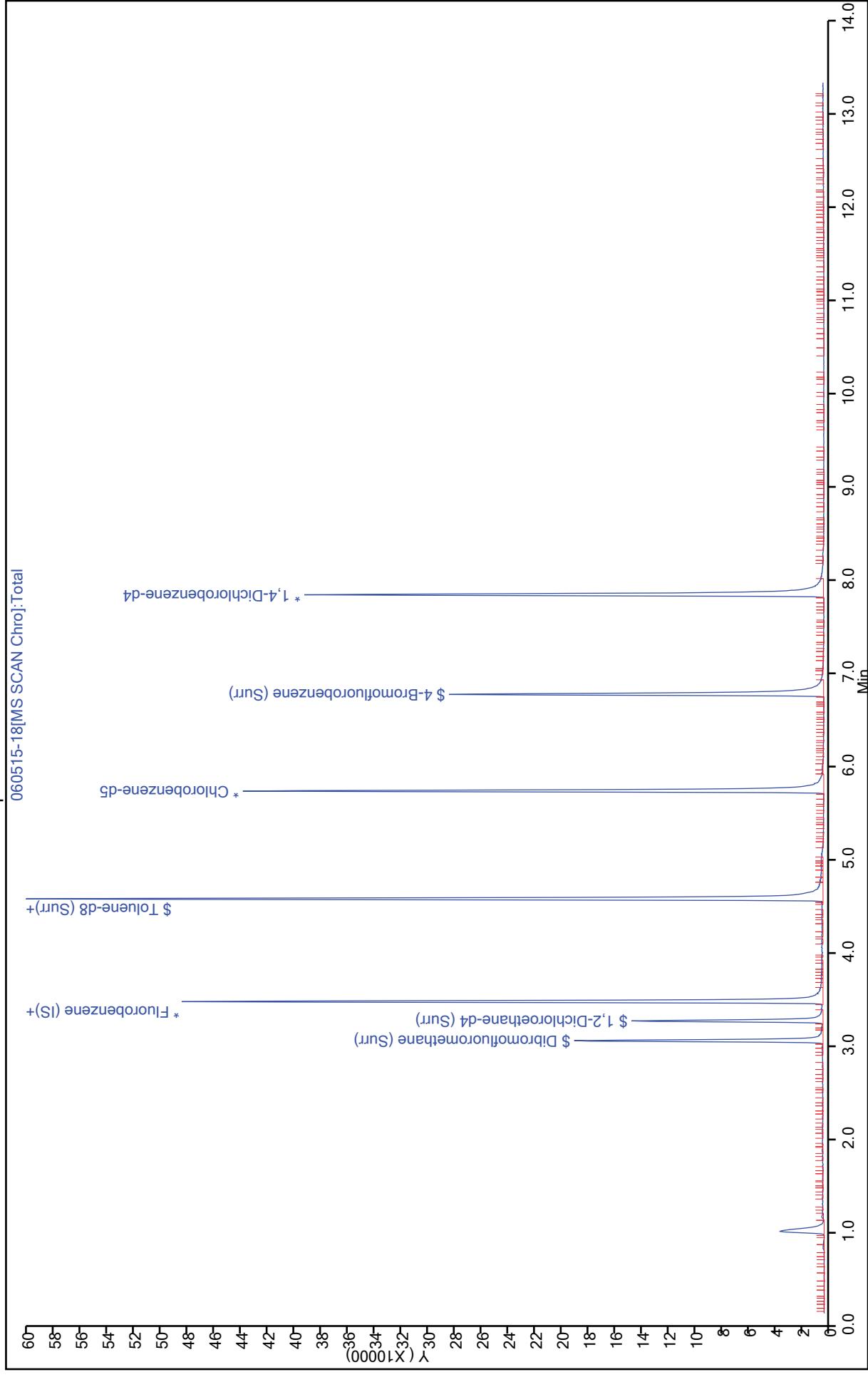
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:48

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-18.D  
Injection Date: 05-Jun-2015 18:53:30  
Lims ID: 490-79781-A-4  
Client ID: PMP-50-060215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 18  
Instrument ID: HP32  
Lab Sample ID: 490-79781-4  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-00-060215

Lab Sample ID: 490-79781-5

Matrix: Surface Water

Lab File ID: 060515-19.D

Analysis Method: 8260C

Date Collected: 06/02/2015 15:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 19:21

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-00-060215

Lab Sample ID: 490-79781-5

Matrix: Surface Water

Lab File ID: 060515-19.D

Analysis Method: 8260C

Date Collected: 06/02/2015 15:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 19:21

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		70-130
1868-53-7	Dibromofluoromethane (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	120		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-00-060215

Lab Sample ID: 490-79781-5

Matrix: Surface Water

Lab File ID: 060515-19.D

Analysis Method: 8260C

Date Collected: 06/02/2015 15:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 19:21

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

Number TICs Found: 0

TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-19.D  
 Lims ID: 490-79781-A-5 Lab Sample ID: 490-79781-5  
 Client ID: PAB-00-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 19:21:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-5  
 Misc. Info.: 490-0056059-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:15:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.447	0.001	99	358601	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	250941	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	94	120707	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.028	0.001	94	86298	25.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.240	0.001	0	78191	25.7	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.552	0.001	92	374274	30.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.751	0.001	96	96148	26.9	
23 Acetone	58	1.847	1.846	0.001	95	215	0.4956	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-19.D  
 Lims ID: 490-79781-A-5 Lab Sample ID: 490-79781-5  
 Client ID: PAB-00-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 19:21:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-5  
 Misc. Info.: 490-0056059-019  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:15:44

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.752 96148

**Reagents:**

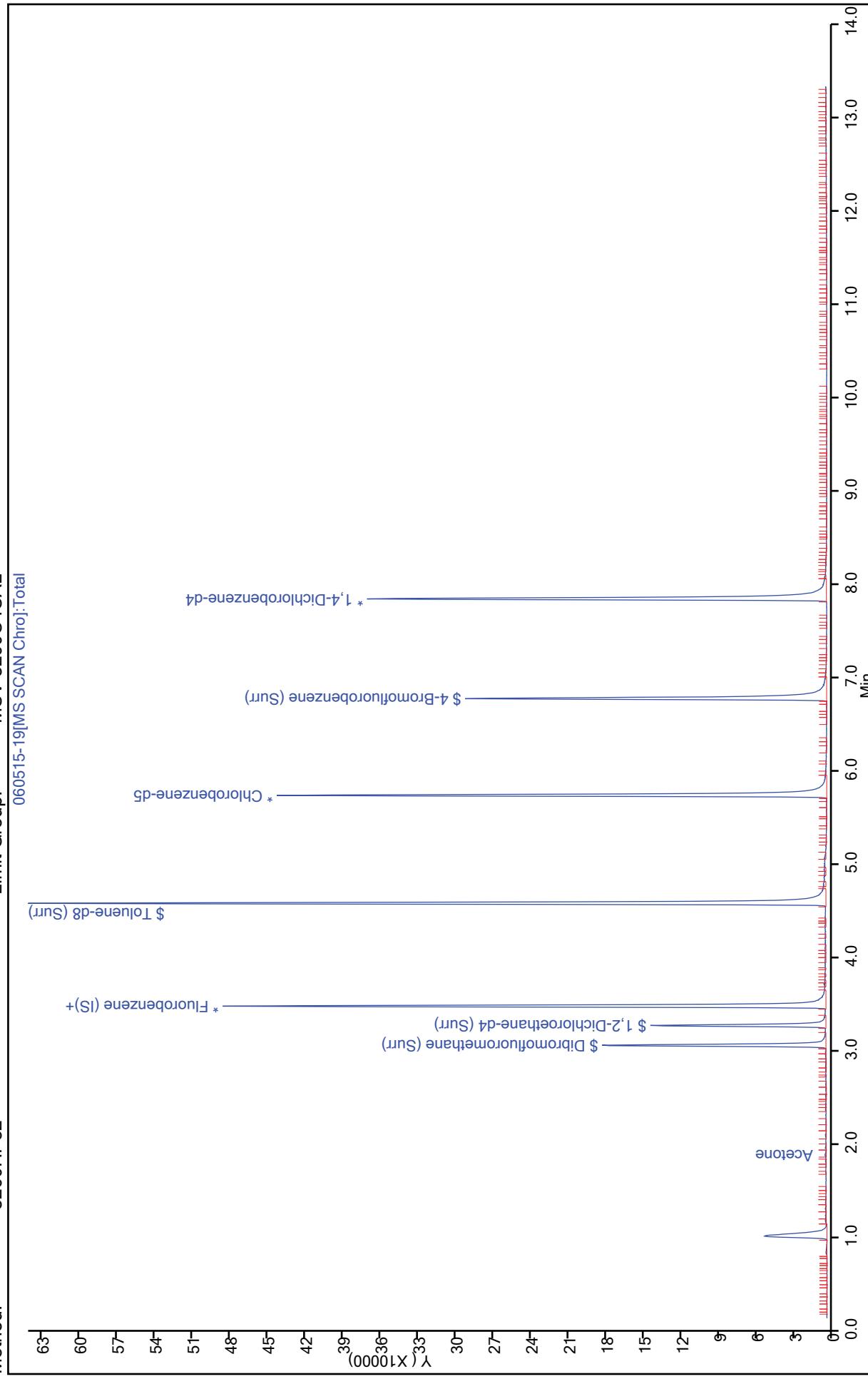
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:51

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-19.D  
Injection Date: 05-Jun-2015 19:21:30  
Lims ID: 490-79781-A-5  
Client ID: PAB-00-060215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 19  
Instrument ID: HP32  
Lab Sample ID: 490-79781-5  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-01-060215

Lab Sample ID: 490-79781-6

Matrix: Surface Water

Lab File ID: 060515-20.D

Analysis Method: 8260C

Date Collected: 06/02/2015 16:10

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 19:49

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-01-060215

Lab Sample ID: 490-79781-6

Matrix: Surface Water

Lab File ID: 060515-20.D

Analysis Method: 8260C

Date Collected: 06/02/2015 16:10

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 19:49

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		70-130
1868-53-7	Dibromofluoromethane (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	115		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: PAB-01-060215 Lab Sample ID: 490-79781-6  
Matrix: Surface Water Lab File ID: 060515-20.D  
Analysis Method: 8260C Date Collected: 06/02/2015 16:10  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 19:49  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-20.D  
 Lims ID: 490-79781-A-6 Lab Sample ID: 490-79781-6  
 Client ID: PAB-01-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 19:49:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-6  
 Misc. Info.: 490-0056059-020  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:17:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.447	0.003	99	348559	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.711	0.003	84	247634	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.826	7.823	0.003	94	120522	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.028	-0.003	94	85648	25.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.240	-0.003	0	77439	26.2	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.552	0.003	92	354372	28.8	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.754	6.751	0.003	96	93199	26.1	
23 Acetone	58	1.844	1.846	-0.002	99	281	1.05	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-20.D  
 Lims ID: 490-79781-A-6 Lab Sample ID: 490-79781-6  
 Client ID: PAB-01-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 19:49:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-6  
 Misc. Info.: 490-0056059-020  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:17:04

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.754 93199

**Reagents:**

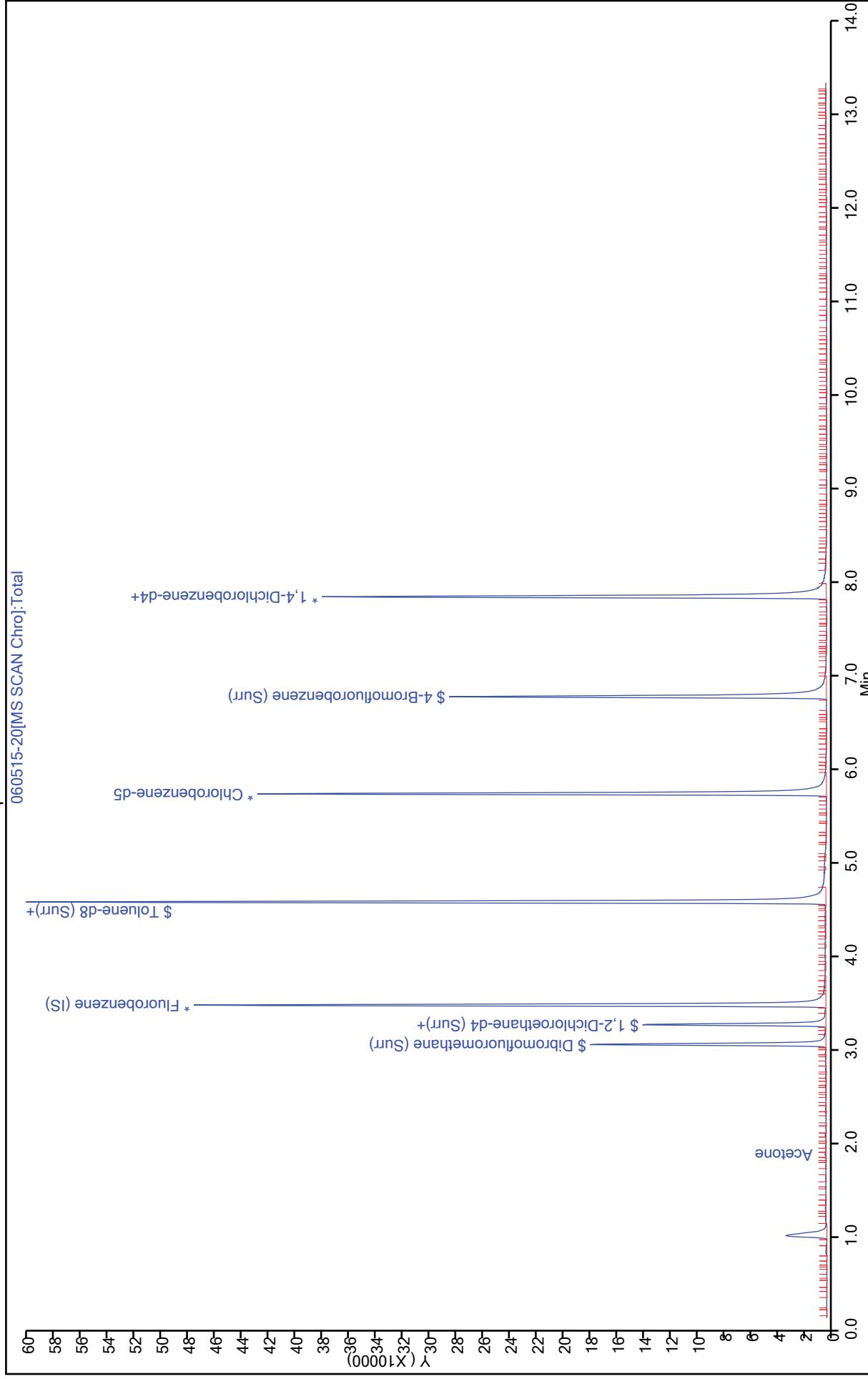
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:54

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-20.D  
Injection Date: 05-Jun-2015 19:49:30  
Lims ID: 490-79781-A-6  
Client ID: PAB-01-060215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 20  
Instrument ID: HP32  
Lab Sample ID: 490-79781-6  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL  
ALS Bottle#: 20



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-2

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-01-060125

Lab Sample ID: 490-79782-7

Matrix: Surface Water

Lab File ID: 060525-12.D

Analysis Method: 8160C

Date Collected: 06/01/1025 26:10

Sample wt/vol: 20 (mL)

Date Analyzed: 06/05/1025 10:28

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 2

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-614 ID: 0.28 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 153850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-2	Acetone	1.7	U	5.0	1.7
72-43-1	Benzene	0.10	U	0.50	0.10
75-15-1	Bromoform	0.19	U	0.50	0.19
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	1-Butanone (MEK)	1.6	U	50	1.6
75-25-0	Carbon disulfide	0.11	U	0.50	0.11
56-13-5	Carbon tetrachloride	0.28	U	0.50	0.28
208-90-7	Chlorobenzene	0.28	U	0.50	0.28
214-48-2	Chlorodibromomethane	0.15	U	0.50	0.15
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.13	U	0.50	0.13
74-87-3	Chloromethane	0.36	U	0.50	0.36
256-59-1	cis-2,1-Dichloroethene	0.12	U	0.50	0.12
20062-02-5	cis-2,3-Dichloropropene	0.27	U	0.50	0.27
220-81-7	Cyclohexane	0.23	U	2.0	0.23
96-21-8	2,1-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-2	2,1-Dichlorobenzene	0.29	U	0.50	0.29
542-73-2	2,3-Dichlorobenzene	0.28	U	0.50	0.28
206-46-7	2,4-Dichlorobenzene	0.27	U	0.50	0.27
75-17-4	Dichlorobromomethane	0.27	U	0.50	0.27
75-72-8	Dichlorodifluoromethane	0.27	U	0.50	0.27
75-34-3	2,2-Dichloroethane	0.14	U	0.50	0.14
207-06-1	2,1-Dichloroethane	0.10	U	0.50	0.10
75-35-4	2,2-Dichloroethene	0.15	U	0.50	0.15
78-87-5	2,1-Dichloropropane	0.15	U	0.50	0.15
200-42-4	Ethylbenzene	0.29	U	0.50	0.29
206-93-4	2,1-Dibromoethane	0.12	U	0.50	0.12
592-78-6	1-Hexanone	2.3	U	5.0	2.3
98-81-8	Isopropylbenzene	0.33	U	2.0	0.33
79-10-9	Methyl acetate	0.58	U	20	0.58
208-87-1	Methylcyclohexane	0.090	U	0.50	0.090
75-09-1	Methylene Chloride	0.11	U	3.0	0.11
208-20-2	4-Methyl-1-pentanone (MIBK)	0.82	U	5.0	0.82
2634-04-4	Methyl tert-butyl ether	0.27	U	0.50	0.27
200-41-5	Styrene	0.18	U	0.50	0.18
79-34-5	2,2,1,1-Tetrachloroethane	0.29	U	0.50	0.29

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-2

SDG No.: \_\_\_\_\_

Client Sample ID: PAB-01-060125 Lab Sample ID: 490-79782-7

Matrix: Surface Water Lab File ID: 060525-12.D

Analysis Method: 8160C Date Collected: 06/01/1025 26:10

Sample wt/vol: 20 (mL) Date Analyzed: 06/05/1025 10:28

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 2

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-614 ID: 0.28 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 153850 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
217-28-4	Tetrachloroethene	0.24	U	0.50	0.24
208-88-3	Toluene	0.27	U	0.50	0.27
256-60-5	trans-2,1-Dichloroethene	0.13	U	0.50	0.13
20062-01-6	trans-2,3-Dichloropropene	0.27	U	0.50	0.27
210-81-2	2,1,4-Trichlorobenzene	0.10	U	0.50	0.10
72-55-6	2,2,2-Trichloroethane	0.29	U	0.50	0.29
79-00-5	2,2,1-Trichloroethane	0.29	U	0.50	0.29
79-02-6	Trichloroethene	0.10	U	0.50	0.10
75-69-4	Trichlorofluoromethane	0.12	U	0.50	0.12
76-23-2	Freon-223	0.25	U	2.0	0.25
75-02-4	Vinyl chloride	0.28	U	0.50	0.28
2330-10-7	Xylenes, Total	0.58	U	2.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	206		70-230
2868-53-7	Dibromofluoromethane (Surr)	202		70-230
1037-16-5	Toluene-d8 (Surr)	221		70-230
27060-07-0	2,1-Dichloroethane-d4 (Surr)	204		70-230

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-2  
SDG No.: \_\_\_\_\_  
Client Sample ID: PAB-01-060125 Lab Sample ID: 490-79782-7  
Matrix: Surface Water Lab File ID: 060525-12.D  
Analysis Method: 8160C Date Collected: 06/01/1025 26:10  
Sample wt/vol: 20 (mL) Date Analyzed: 06/05/1025 10:28  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 2  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-614 ID: 0.28 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 153850 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-21.D  
 Lims ID: 490-79781-A-7 Lab Sample ID: 490-79781-7  
 Client ID: PAB-02-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 20:18:30 ALS Bottle#: 21 Worklist Smp#: 21  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-7  
 Misc. Info.: 490-0056059-021  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:18:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.451	3.447	0.004	99	352902	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	245187	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.828	7.823	0.005	95	119595	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.028	-0.001	94	85786	25.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.240	-0.001	0	77845	26.0	
\$ 6 Toluene-d8 (Surr)	98	4.556	4.552	0.004	93	342109	28.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.755	6.751	0.004	97	93946	26.6	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-21.D  
 Lims ID: 490-79781-A-7 Lab Sample ID: 490-79781-7  
 Client ID: PAB-02-060215  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 20:18:30 ALS Bottle#: 21 Worklist Smp#: 21  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-7  
 Misc. Info.: 490-0056059-021  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:18:44

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.755 93946

**Reagents:**

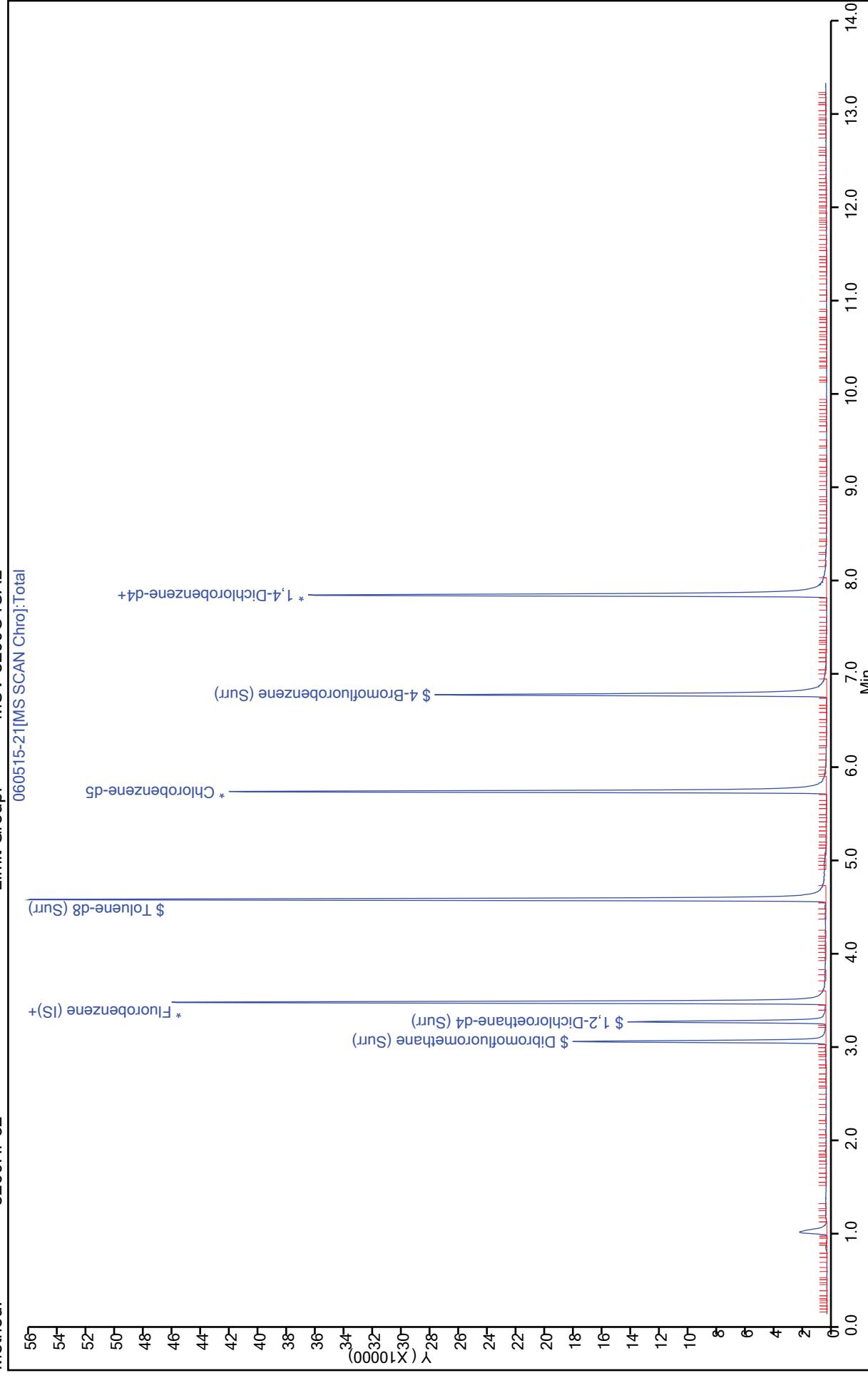
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:57

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-21.D  
Injection Date: 05-Jun-2015 20:18:30  
Lims ID: 490-79781-A-7  
Client ID: PAB-02-060215  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 21  
Instrument ID: HP32  
Lab Sample ID: 490-79781-7  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-180-060315

Lab Sample ID: 490-79781-8

Matrix: Ground Water

Lab File ID: 060515-22.D

Analysis Method: 8260C

Date Collected: 06/03/2015 09:30

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 20:46

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	5.4		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	1.2		0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	14		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.38	J	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.76	J	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.44	J	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.39	J	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.81	J	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.20	J	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-180-060315

Lab Sample ID: 490-79781-8

Matrix: Ground Water

Lab File ID: 060515-22.D

Analysis Method: 8260C

Date Collected: 06/03/2015 09:30

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 20:46

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	140		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.19	J	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	109		70-130
1868-53-7	Dibromofluoromethane (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	115		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: <u>TestAmerica Nashville</u>	Job No.: <u>490-79645-1</u>
SDG No.: _____	
Client Sample ID: <u>PMP-180-060315</u>	Lab Sample ID: <u>490-79781-8</u>
Matrix: <u>Ground Water</u>	Lab File ID: <u>060515-22.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>06/03/2015 09:30</u>
Sample wt/vol: <u>10 (mL)</u>	Date Analyzed: <u>06/05/2015 20:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>253850</u>	Units: <u>ug/L</u>
Number TICs Found: <u>4</u>	TIC Result Total: <u>4.39</u>

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		1.2	J
75-43-4	Dichlorofluoromethane	1.53	0.28	J
110-54-3	Hexane	2.34	0.21	J
36617-02-4	Benzene, (2-bromocyclopropyl)-	8.09	2.7	J N

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-22.D  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 20:46:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-8  
 Misc. Info.: 490-0056059-022  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:20:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	394143	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	244501	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	94	121745	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	93379	24.6	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	83131	24.9	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	349020	28.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	96	97776	27.2	
12 Vinyl chloride	62	1.210	1.215	-0.005	68	854	0.1925	
15 Chloroethane	64	1.433	1.427	0.006	99	41300	14.4	
37 1,1-Dichloroethane	63	2.424	2.423	0.001	95	2918	0.3948	
42 cis-1,2-Dichloroethene	61	2.750	2.745	0.005	74	2464	0.3760	
53 Cyclohexane	56	3.077	3.077	0.000	82	5487	0.7618	
57 Benzene	78	3.278	3.273	0.005	93	96396	5.39	
65 Methylcyclohexane	83	3.817	3.812	0.005	85	1602	0.1983	
76 Toluene	91	4.601	4.606	-0.005	99	2263774	136.3	
87 Chlorobenzene	112	5.739	5.739	0.001	97	12459	1.18	
89 Ethylbenzene	91	5.853	5.831	0.022	94	2199	0.1323	
90 m-Xylene & p-Xylene	91	5.951	5.934	0.017	0	4808	0.3697	
91 o-Xylene	91	6.305	6.277	0.028	95	2043	0.1581	
94 Isopropylbenzene	105	6.621	6.609	0.012	96	13057	0.8061	
110 1,4-Dichlorobenzene	146	7.856	7.845	0.011	87	3303	0.4369	
S 134 Xylenes, Total	1				0		0.5278	

**Reagents:**

VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent
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TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-22.D  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 20:46:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-8  
 Misc. Info.: 490-0056059-022  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:20:33

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Dichlorofluoromethane	1.526	1963	0.2765	
Hexane	2.342	1200	0.2091	
BFB	6.751	97776		
1,2,3-Trimethylbenzene	7.916	1792	0.1464	

## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpdn	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
8.090	76152	2.67	3	59	53973	C9H9Br	196	

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 3 1,4-Dichlorobenzene-d4	7.824	711974	25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

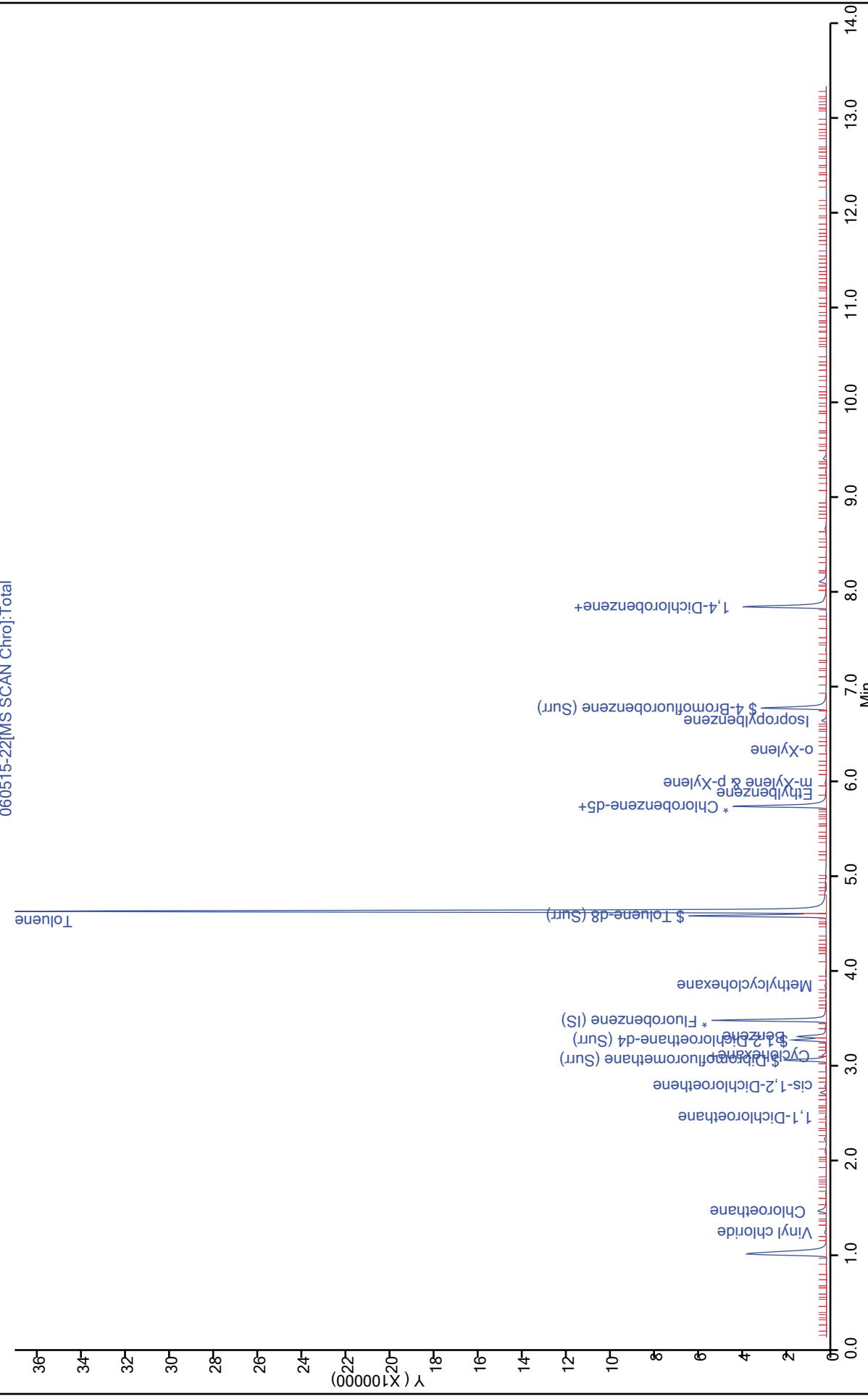
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent
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Report Date: 09-Jun-2015 13:12:00

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D  
Injection Date: 05-Jun-2015 20:46:30  
Lims ID: 490-79781-A-8  
Client ID: PMP-180-060315  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 22  
Instrument ID: HP32  
Lab Sample ID: 490-79781-8  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL  
060515-22\\MS SCAN Chro]:Total



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

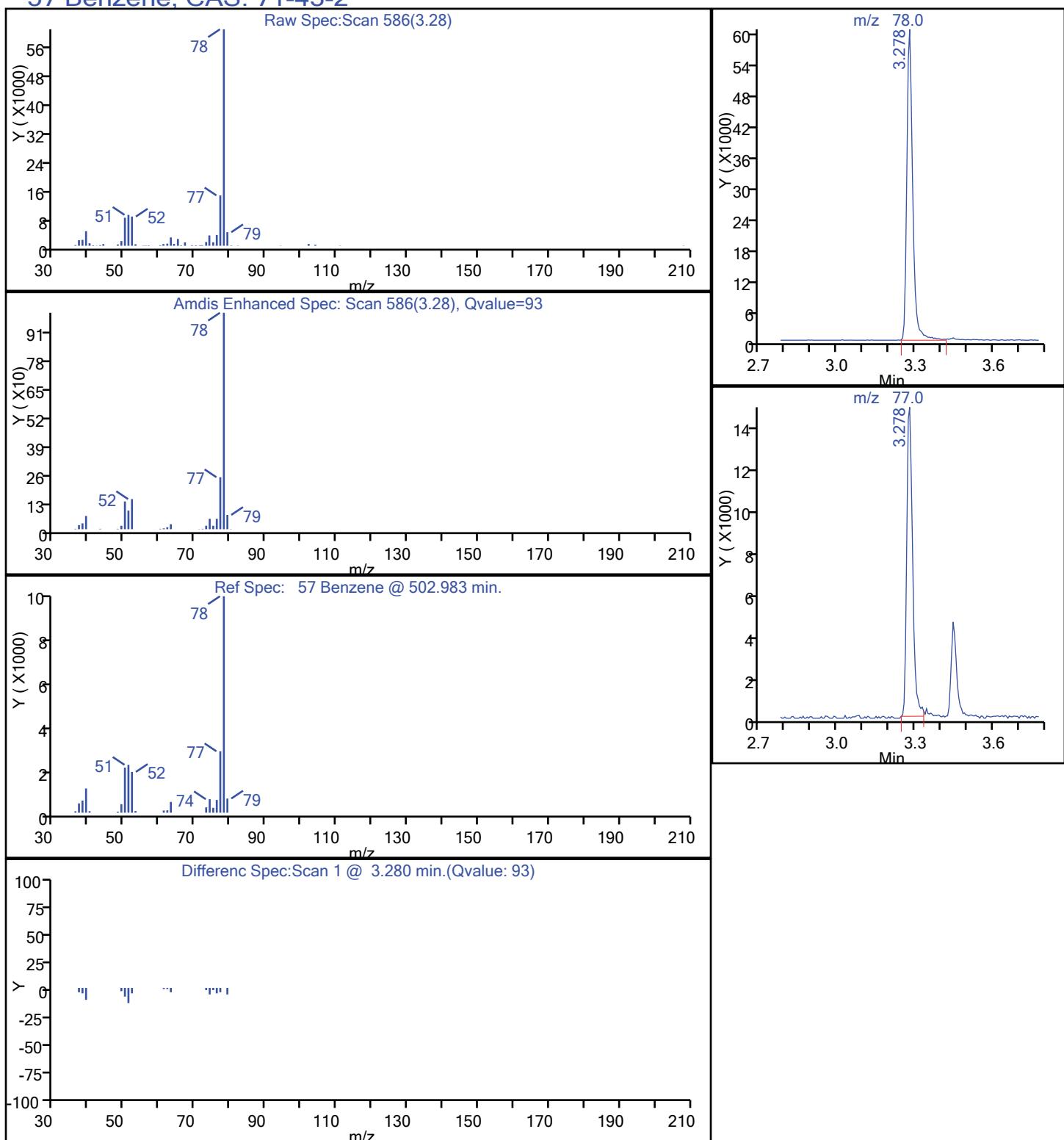
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

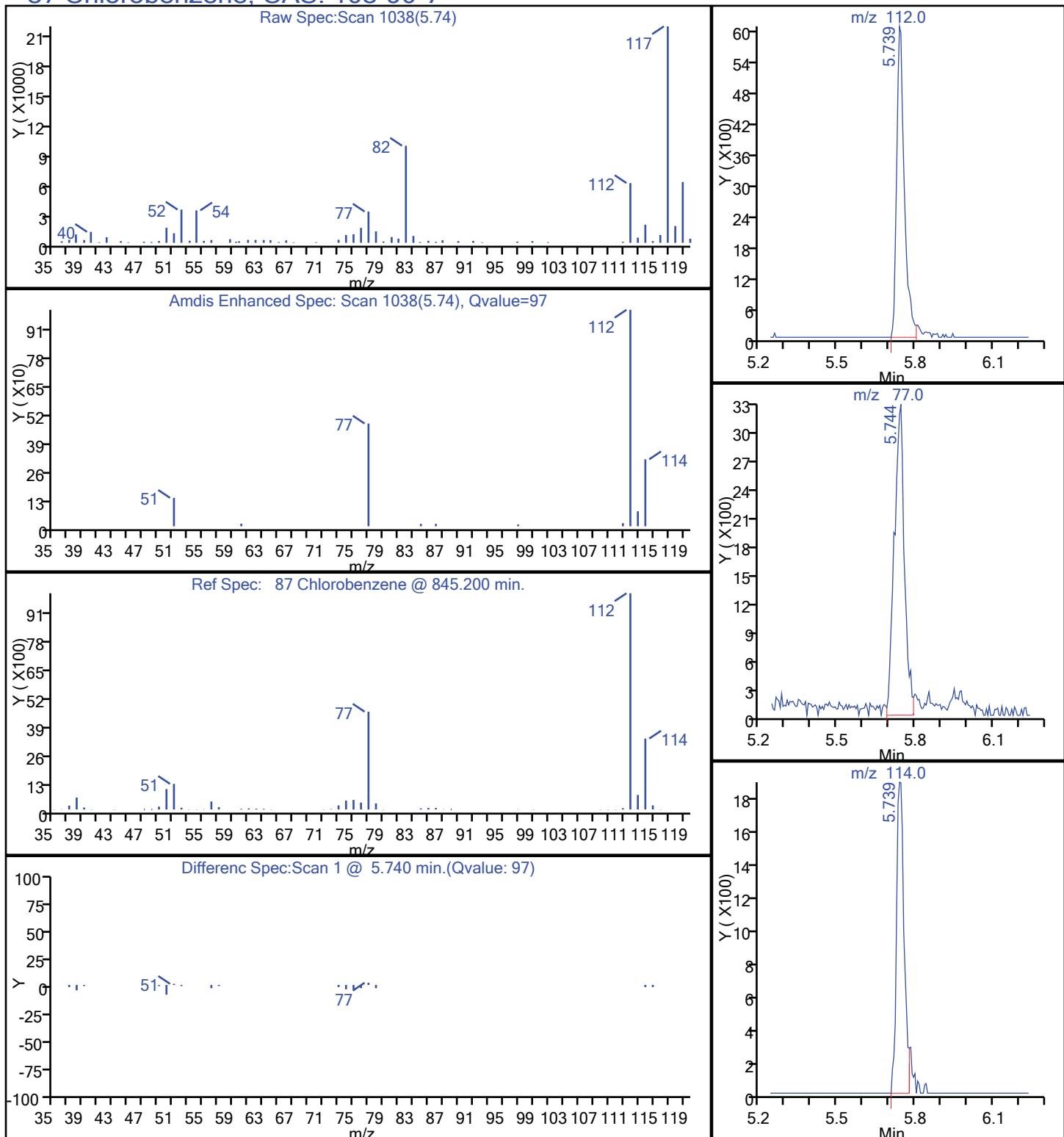
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Detector: MS SCAN

**57 Benzene, CAS: 71-43-2**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D  
 Injection Date: 05-Jun-2015 20:46:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**87 Chlorobenzene, CAS: 108-90-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

ALS Bottle#: 22 Worklist Smp#: 22

Operator ID: EML

Dil. Factor: 1.0000

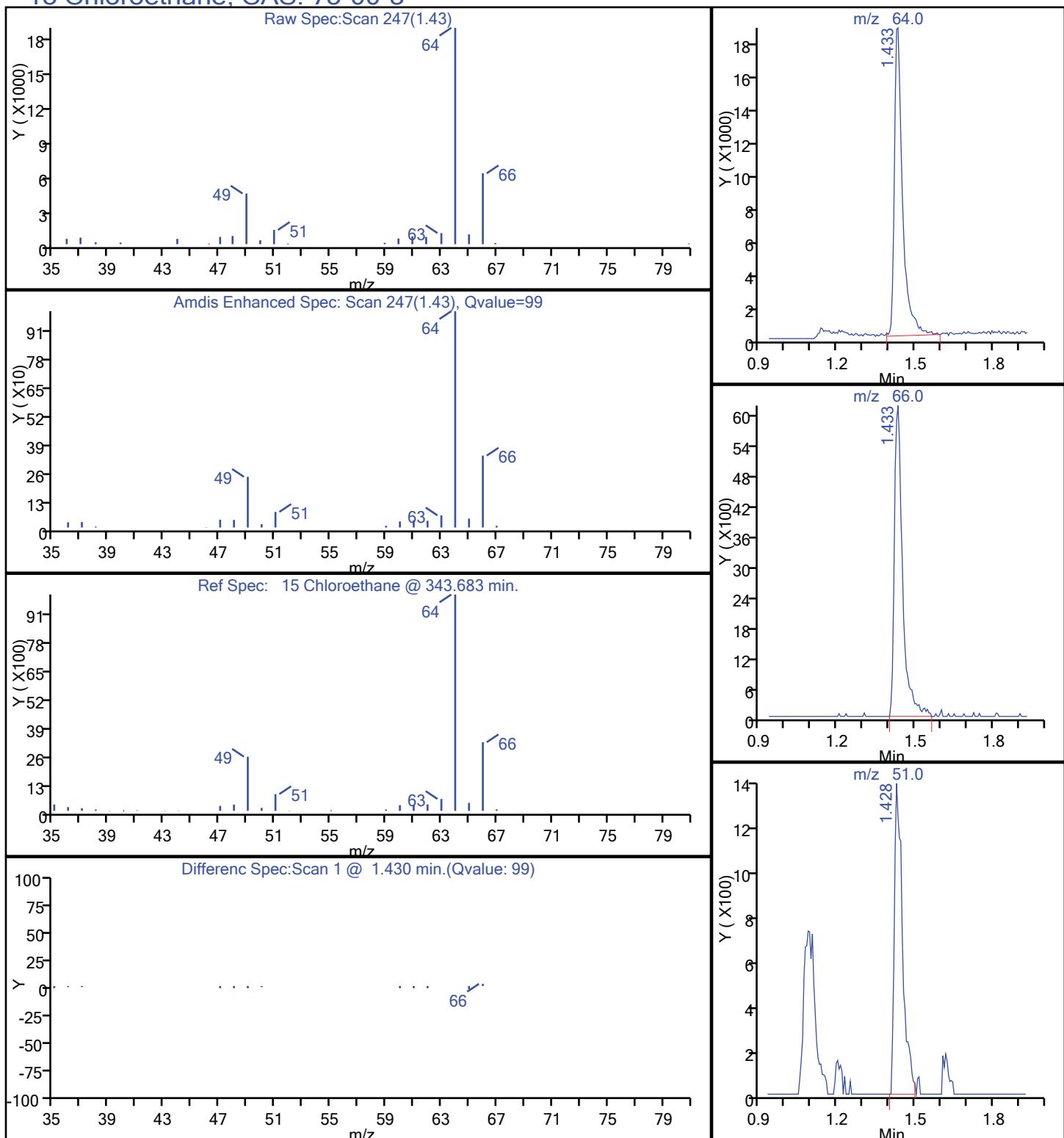
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**15 Chloroethane, CAS: 75-00-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

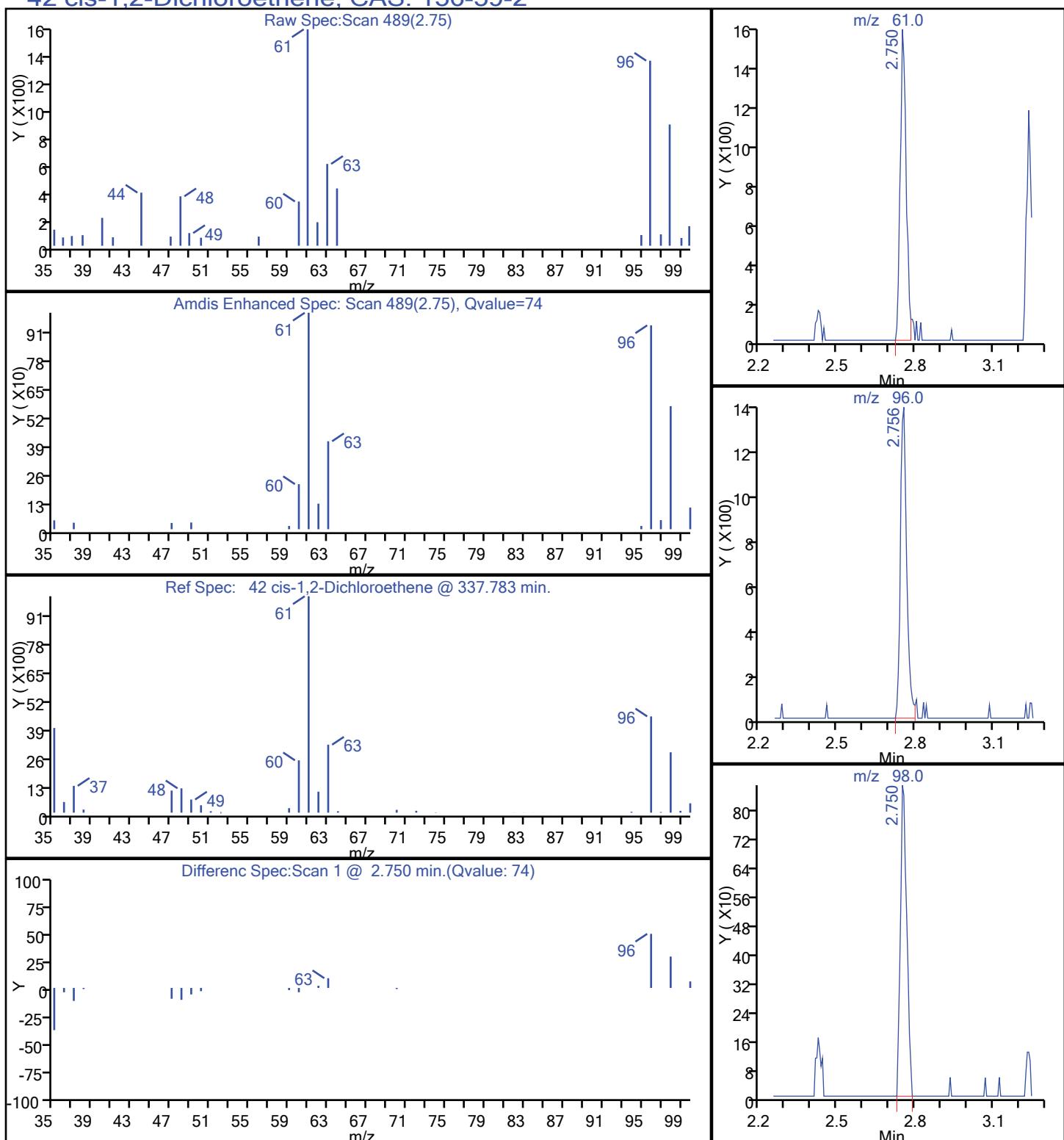
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**42 cis-1,2-Dichloroethene, CAS: 156-59-2**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

ALS Bottle#: 22 Worklist Smp#: 22

Operator ID: EML

Dil. Factor: 1.0000

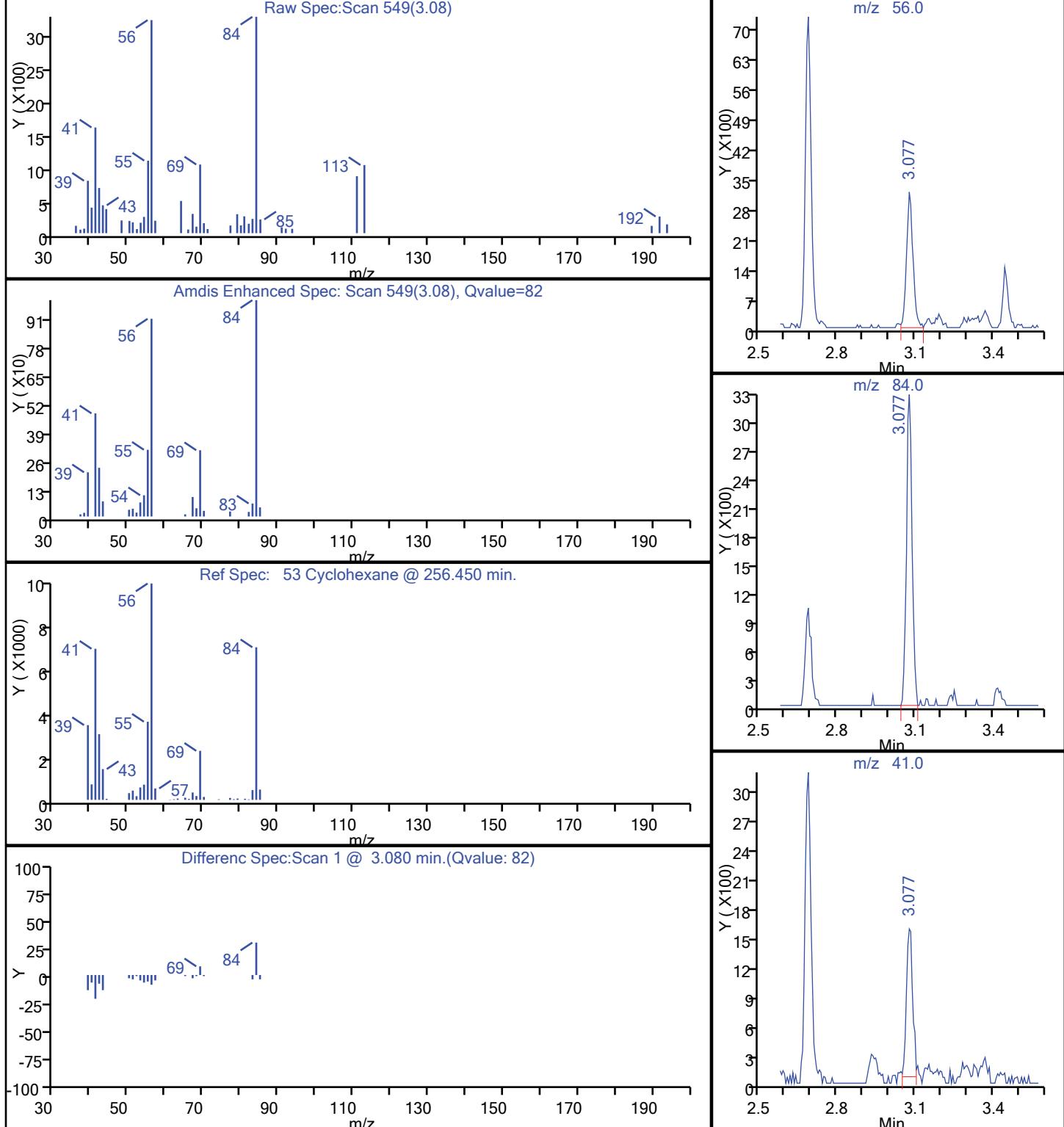
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**53 Cyclohexane, CAS: 110-82-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

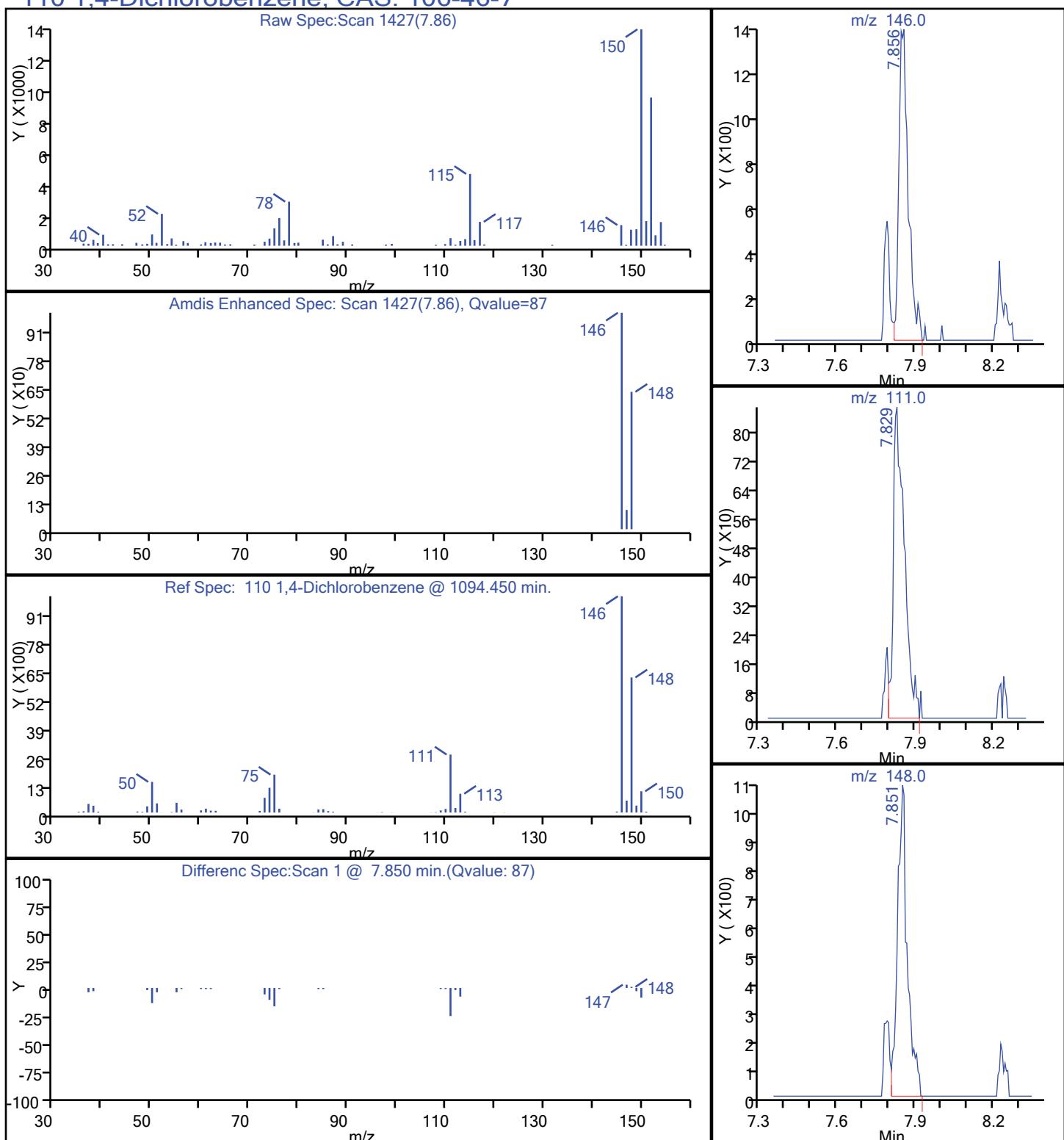
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**110 1,4-Dichlorobenzene, CAS: 106-46-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

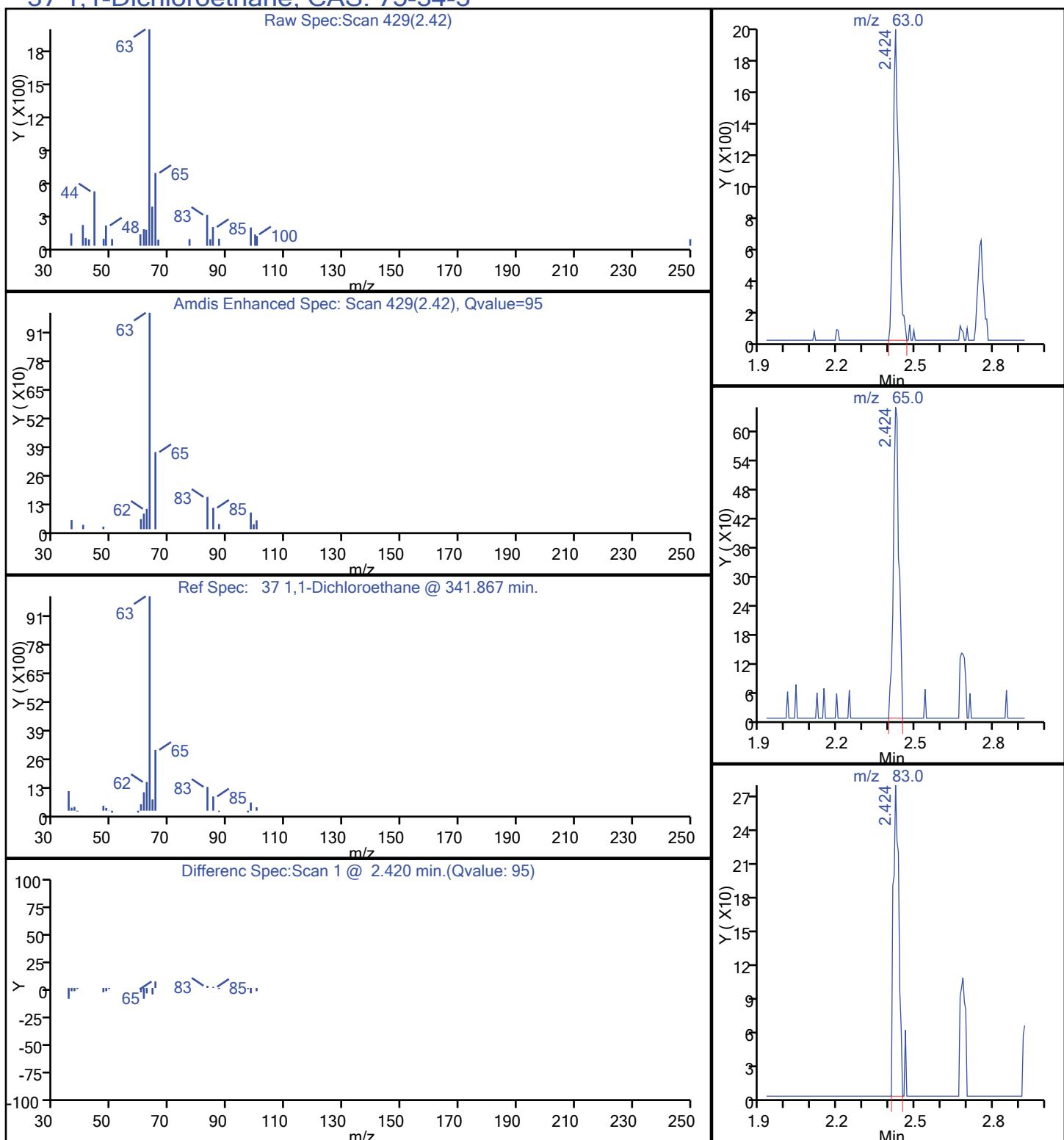
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**37 1,1-Dichloroethane, CAS: 75-34-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

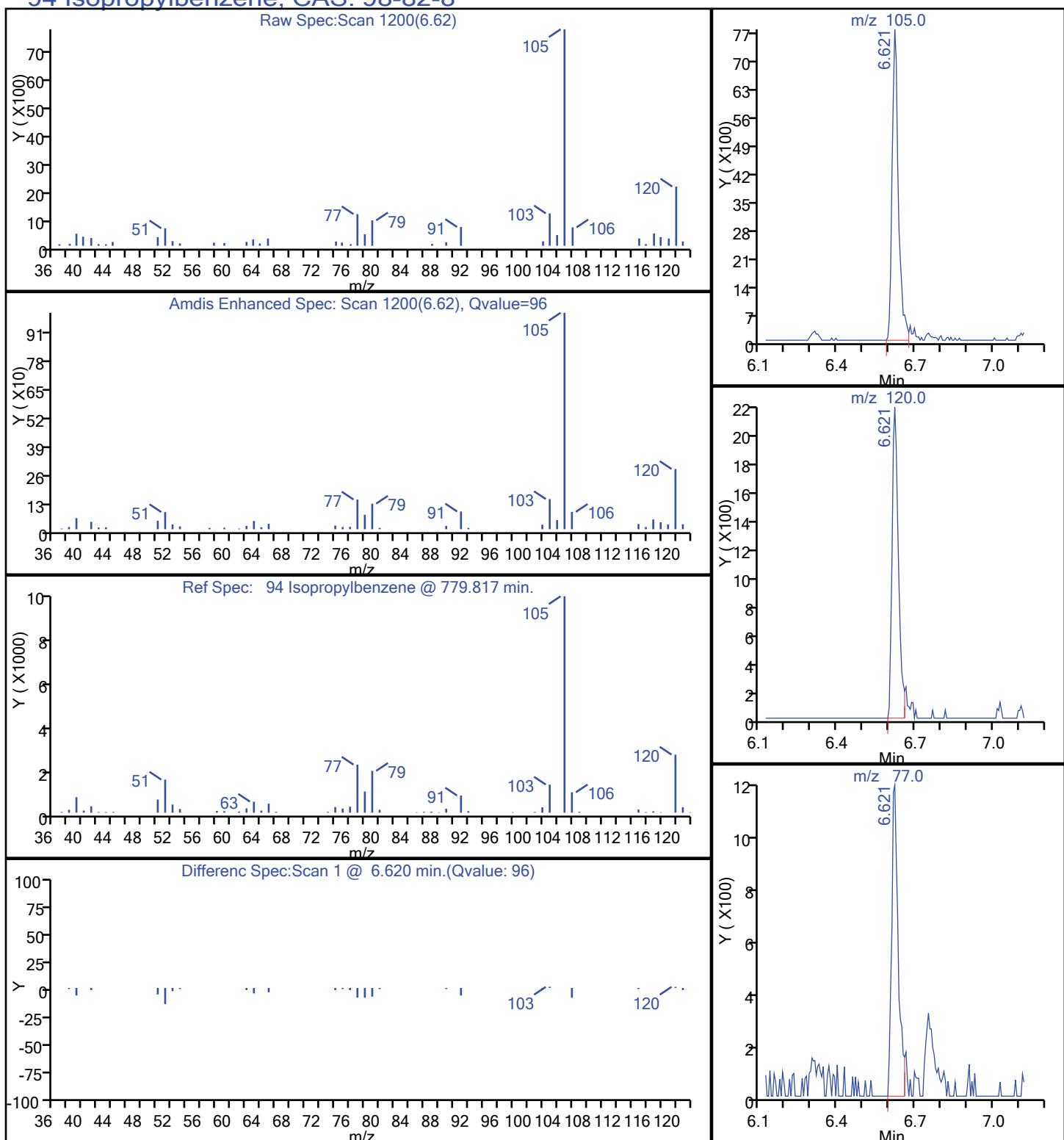
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

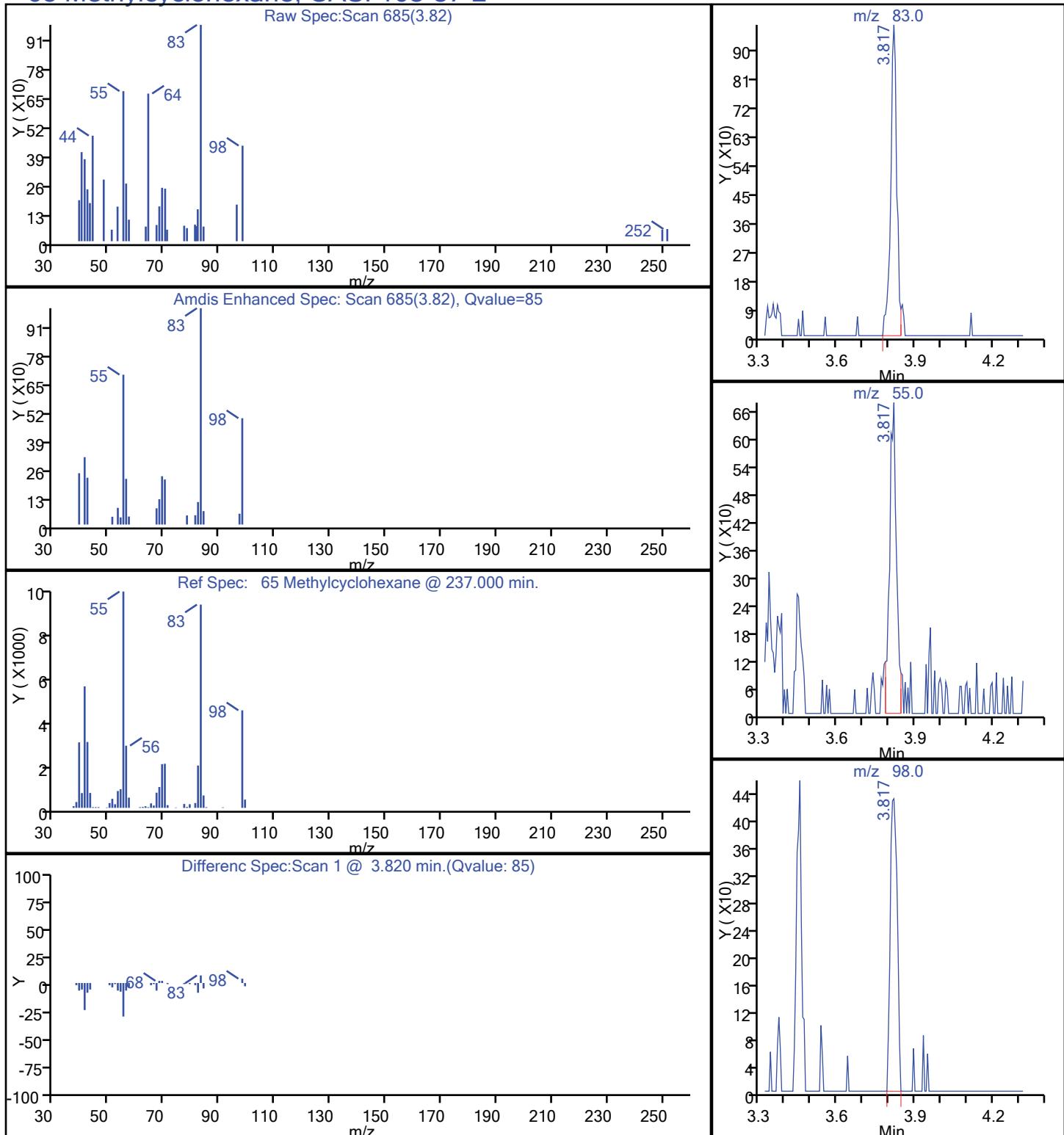
Detector: MS SCAN

**94 Isopropylbenzene, CAS: 98-82-8**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D  
 Injection Date: 05-Jun-2015 20:46:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 65 Methylcyclohexane, CAS: 108-87-2



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

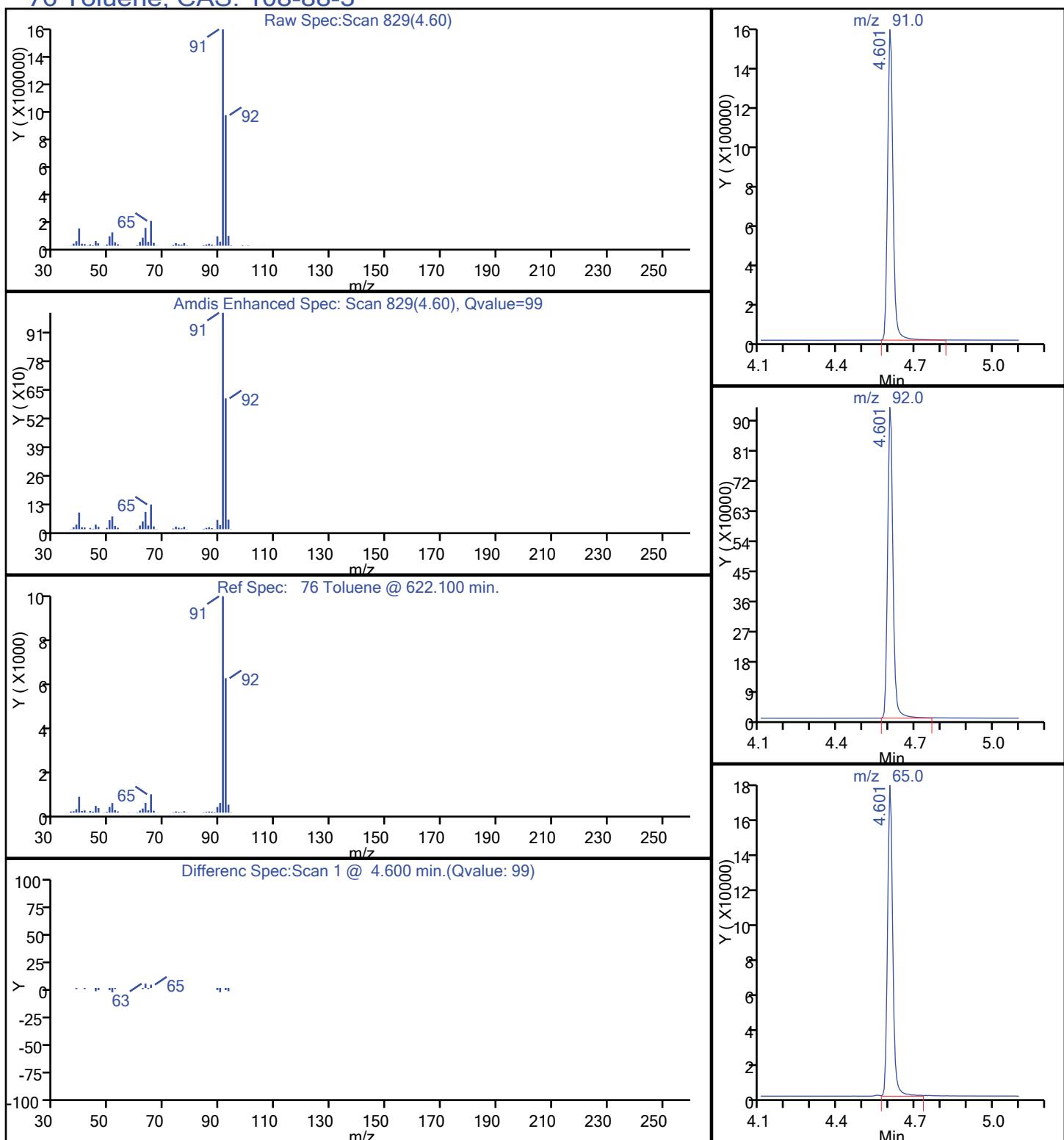
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

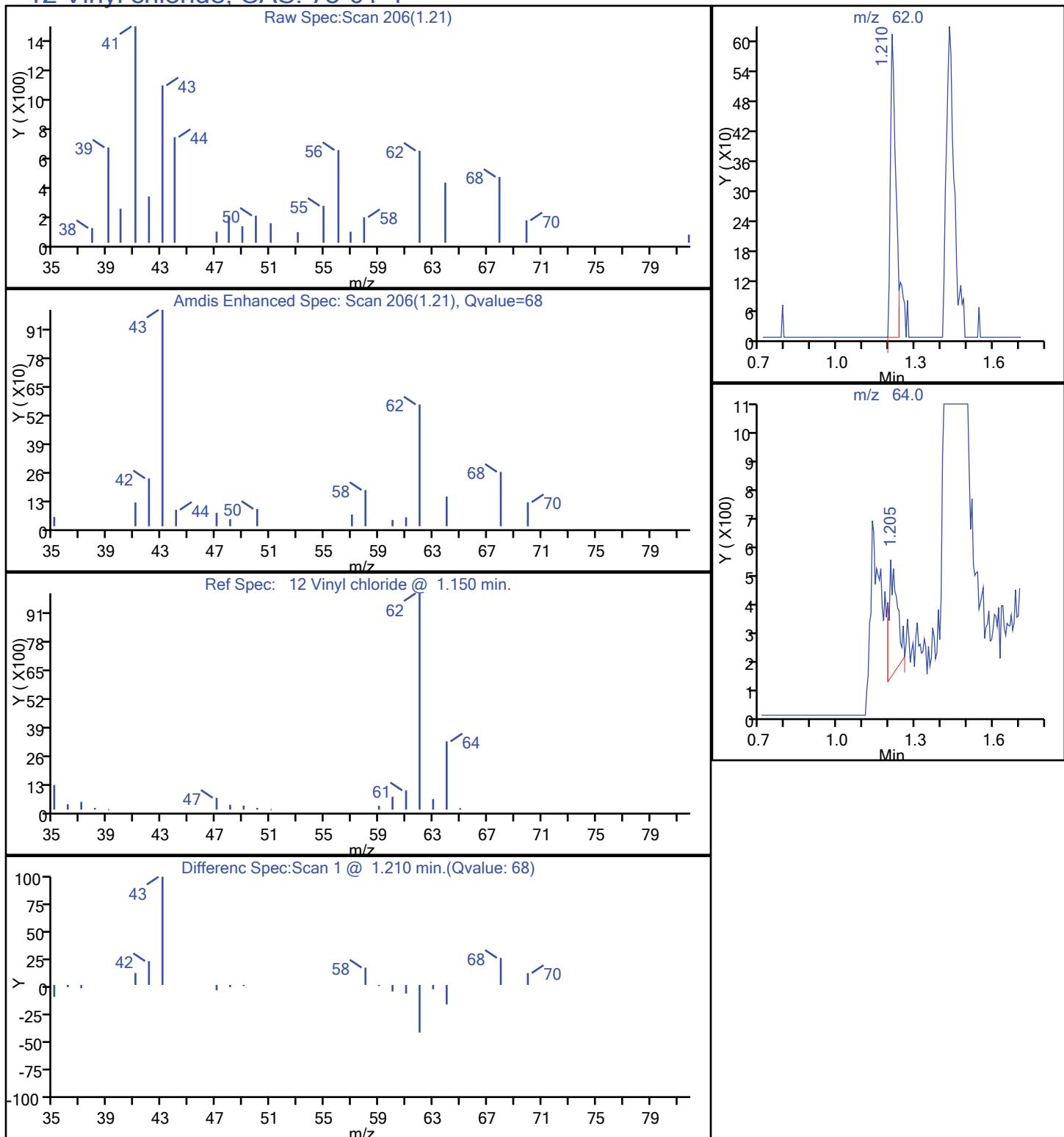
Column: Detector

MS SCAN

**76 Toluene, CAS: 108-88-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D  
 Injection Date: 05-Jun-2015 20:46:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**12 Vinyl chloride, CAS: 75-01-4**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

Operator ID: EML

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 10.000 mL

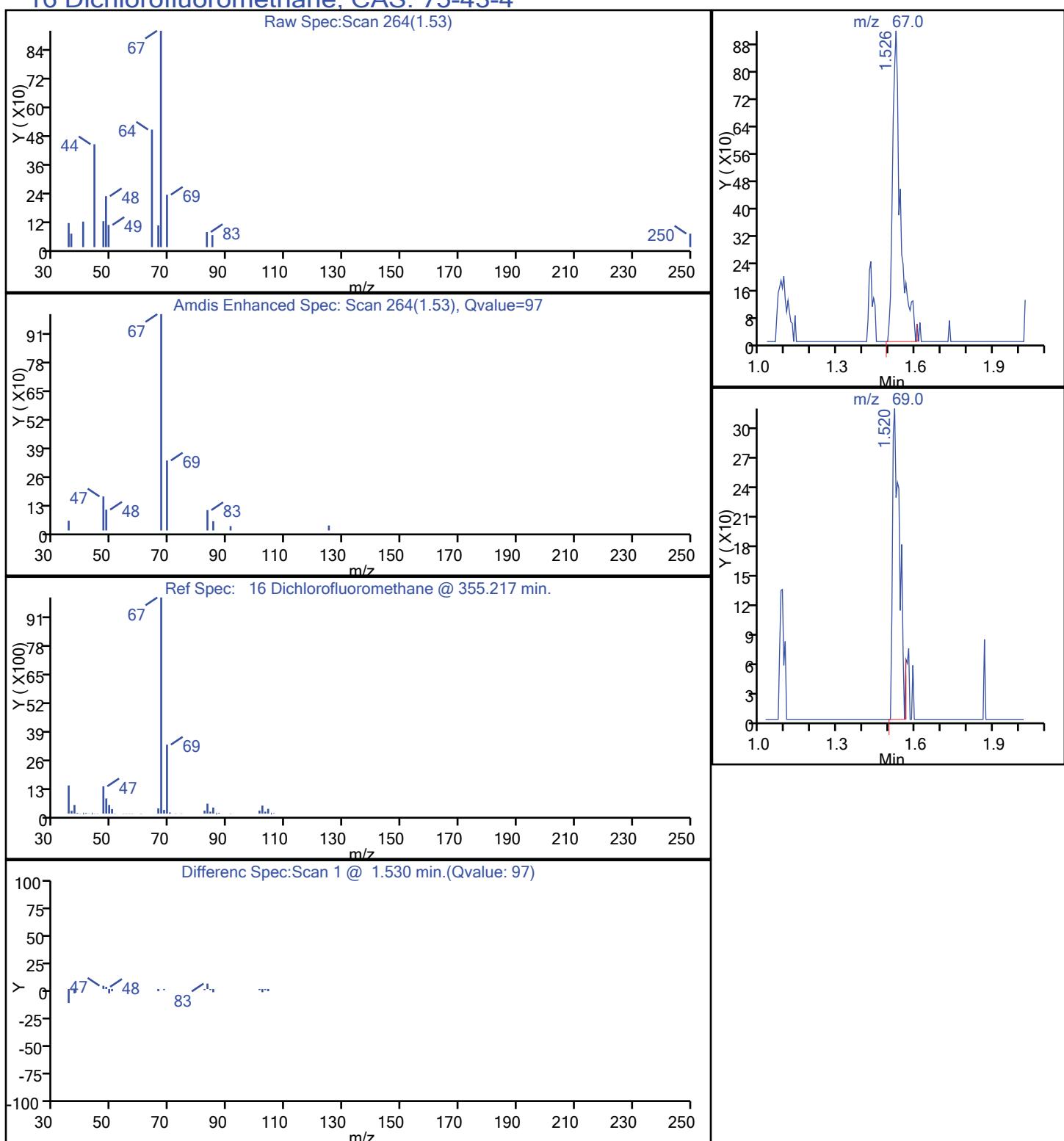
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector MS SCAN

**16 Dichlorofluoromethane, CAS: 75-43-4**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D

Injection Date: 05-Jun-2015 20:46:30

Instrument ID: HP32

Lims ID: 490-79781-A-8

Lab Sample ID: 490-79781-8

Client ID: PMP-180-060315

ALS Bottle#: 22 Worklist Smp#: 22

Operator ID: EML

Dil. Factor: 1.0000

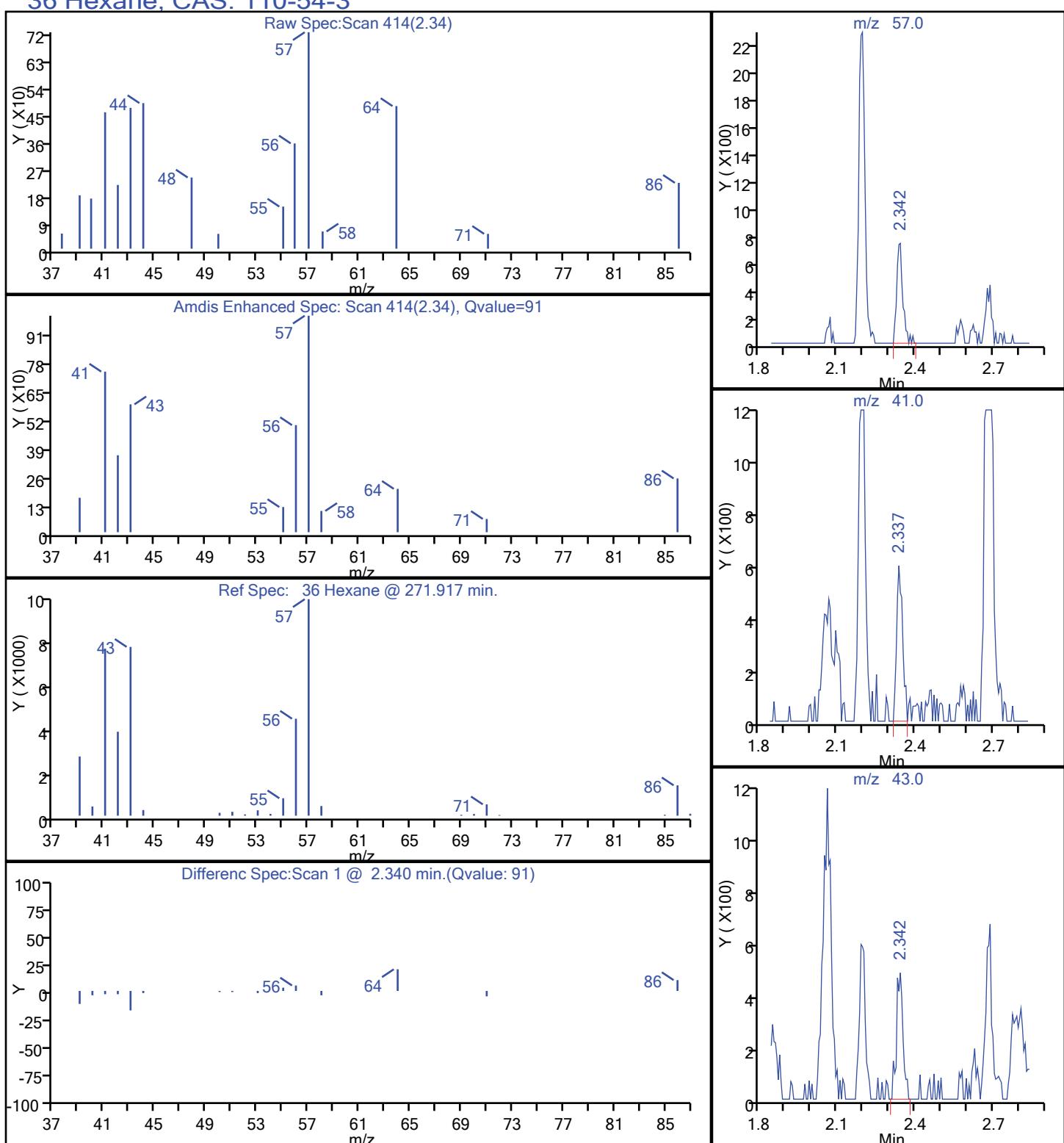
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

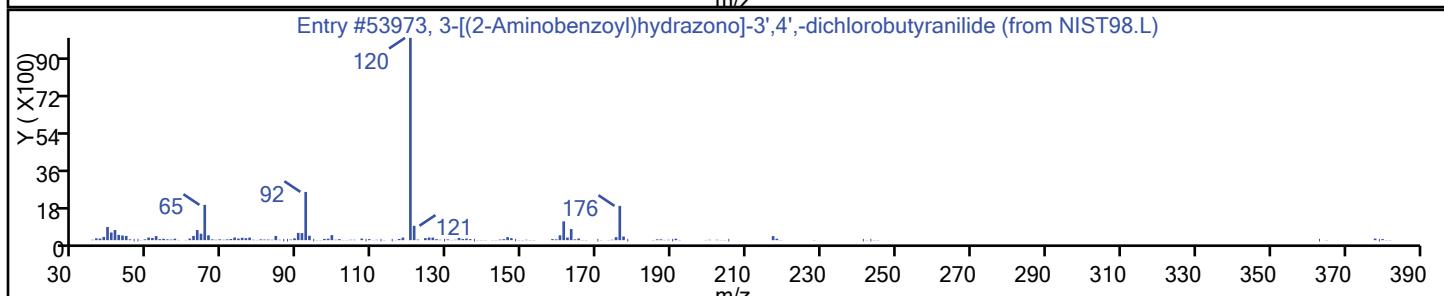
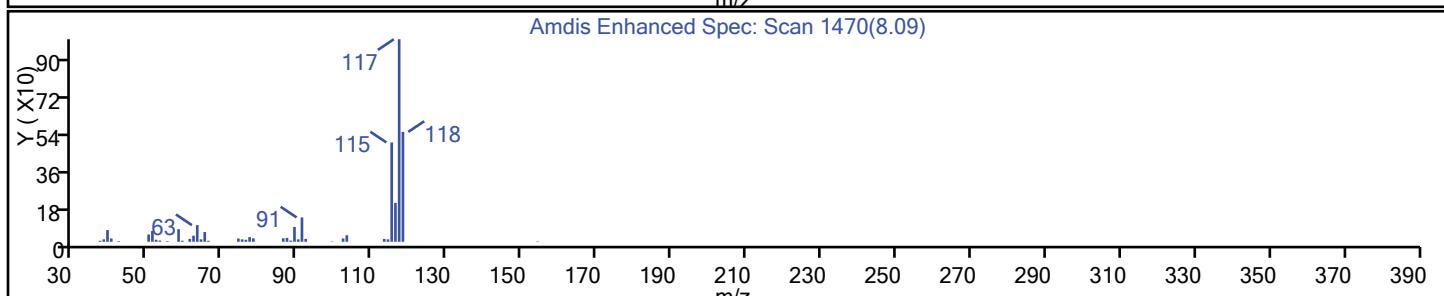
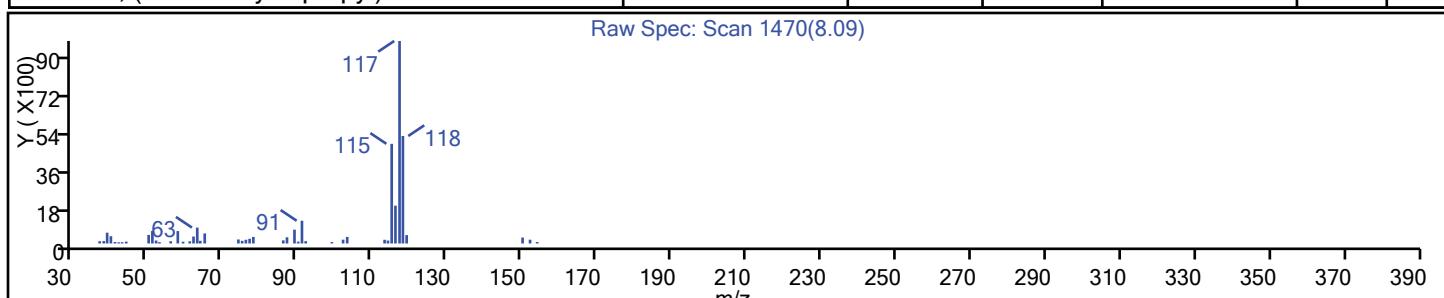
Column:

**36 Hexane, CAS: 110-54-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-22.D  
 Injection Date: 05-Jun-2015 20:46:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-8 Lab Sample ID: 490-79781-8  
 Client ID: PMP-180-060315  
 Operator ID: EML ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, (2-bromocyclopropyl)-	36617-02-4	NIST98	53973	C9H9Br	196	59



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-230-060315

Lab Sample ID: 490-79781-9

Matrix: Ground Water

Lab File ID: 060515-23.D

Analysis Method: 8260C

Date Collected: 06/03/2015 10:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 21:15

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	25		0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	13		0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	8.0		0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	1.4		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.38	J	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.92		0.50	0.18
106-46-7	1,4-Dichlorobenzene	2.8		0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	4.9		1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.23	J	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: PMP-230-060315

Lab Sample ID: 490-79781-9

Matrix: Ground Water

Lab File ID: 060515-23.D

Analysis Method: 8260C

Date Collected: 06/03/2015 10:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 21:15

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	80		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.61	J	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		70-130
1868-53-7	Dibromofluoromethane (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	111		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: <u>TestAmerica Nashville</u>	Job No.: <u>490-79645-1</u>
SDG No.: _____	
Client Sample ID: <u>PMP-230-060315</u>	Lab Sample ID: <u>490-79781-9</u>
Matrix: <u>Ground Water</u>	Lab File ID: <u>060515-23.D</u>
Analysis Method: <u>8260C</u>	Date Collected: <u>06/03/2015 10:45</u>
Sample wt/vol: <u>10 (mL)</u>	Date Analyzed: <u>06/05/2015 21:15</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>253850</u>	Units: <u>ug/L</u>
Number TICs Found: <u>9</u>	TIC Result Total: <u>163.94</u>

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes TIC		1.8	J
60-29-7	Ethyl ether	1.70	0.93	J
110-54-3	Hexane	2.35	0.21	J
109-99-9	Tetrahydrofuran	2.94	3.5	J
80-62-6	Methyl methacrylate	3.95	0.68	J
123-91-1	1,4-Dioxane	3.97	150	J
103-65-1	N-Propylbenzene	7.01	0.62	
135-01-3	Benzene, 1,2-diethyl-	8.09	3.3	J N
91-20-3	Naphthalene	10.10	2.9	J

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-23.D  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 21:15:30 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-9  
 Misc. Info.: 490-0056059-023  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:22:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.447	0.003	99	355432	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.711	0.003	84	251270	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.826	7.823	0.003	94	128579	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.028	-0.003	94	87528	25.6	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.240	-0.002	0	81327	27.0	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.552	0.003	93	346497	27.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.754	6.751	0.003	96	106683	28.1	
15 Chloroethane	64	1.430	1.427	0.003	99	20939	7.99	
42 cis-1,2-Dichloroethene	61	2.759	2.745	0.014	66	785	0.1328	
53 Cyclohexane	56	3.080	3.077	0.003	87	8846	1.36	
57 Benzene	78	3.276	3.273	0.003	95	410413	25.4	
65 Methylcyclohexane	83	3.820	3.812	0.008	85	1656	0.2273	
76 Toluene	91	4.604	4.606	-0.002	98	1370936	80.3	
87 Chlorobenzene	112	5.736	5.739	-0.002	97	142747	13.2	
89 Ethylbenzene	91	5.851	5.831	0.019	92	2360	0.1381	
90 m-Xylene & p-Xylene	91	5.948	5.934	0.014	0	8176	0.6117	
91 o-Xylene	91	6.313	6.277	0.036	93	1216	0.0916	
94 Isopropylbenzene	105	6.618	6.609	0.009	96	82330	4.95	
108 1,3-Dichlorobenzene	146	7.777	7.758	0.019	97	6812	0.9238	
110 1,4-Dichlorobenzene	146	7.848	7.845	0.003	94	22040	2.76	
113 1,2-Dichlorobenzene	146	8.224	8.194	0.030	96	2571	0.3837	
S 134 Xylenes, Total	1				0		0.7033	

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-23.D  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 21:15:30 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-9  
 Misc. Info.: 490-0056059-023  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 08-Jun-2015 13:22:58

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Ethyl ether	1.703	2087	0.9279	
Hexane	2.345	1092	0.2110	
Tetrahydrofuran	2.938	1642	3.48	
Methyl methacrylate	3.951	1086	0.6802	
1,4-Dioxane	3.967	2102	149.3	
BFB	6.754	106683		
N-Propylbenzene	7.010	10720	0.6165	
1,2,3-Trimethylbenzene	7.914	3287	0.2542	
Naphthalene	10.096	15328	2.91	

## Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
135-01-3	Benzene, 1,2-diethyl-							
8.088	110107	3.31	3	80	14329	C10H14	134	

## Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 3 1,4-Dichlorobenzene-d4	7.826	832236	25.0

**QC Flag Legend**

Processing Flags

**Reagents:**

VOA\_ISSS\_50\_W\_00026

Amount Added: 5.00

Units: uL

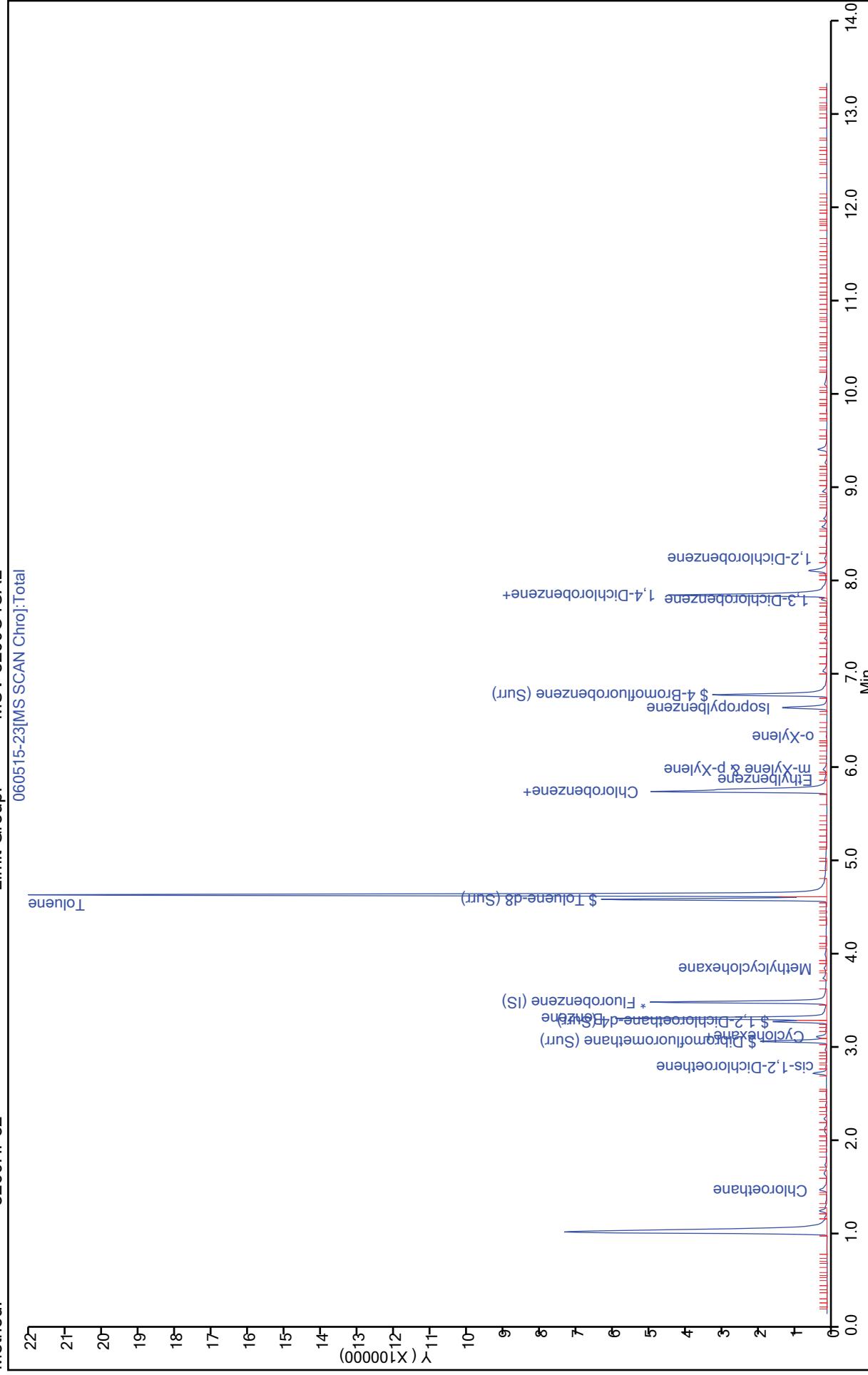
Run Reagent

Report Date: 09-Jun-2015 13:12:04

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
Injection Date: 05-Jun-2015 21:15:30  
Lims ID: 490-79781-A-9  
Client ID: PMP-230-060315  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 23  
Instrument ID: HP32  
Lab Sample ID: 490-79781-9  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

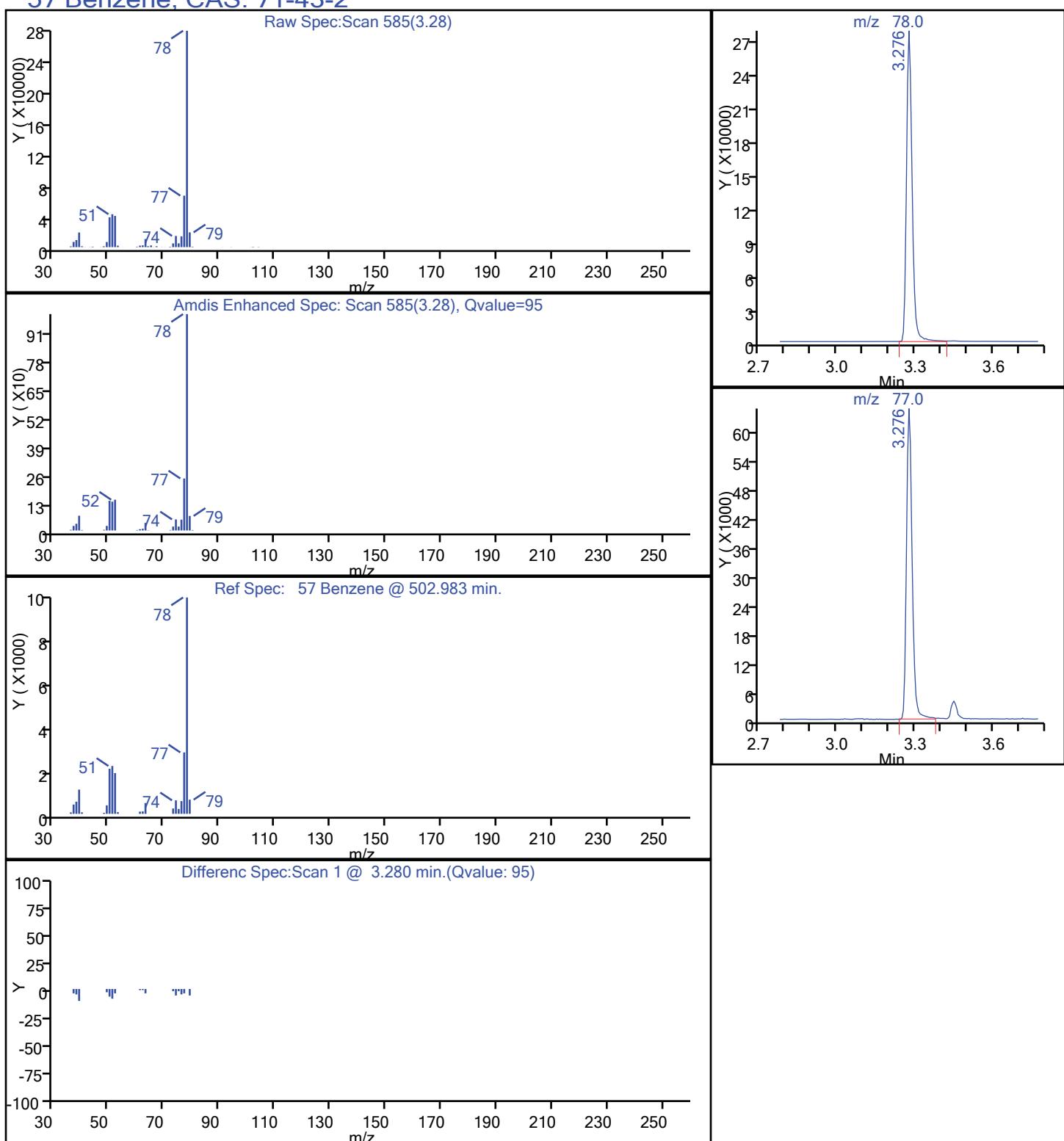
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

MS SCAN

**57 Benzene, CAS: 71-43-2**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

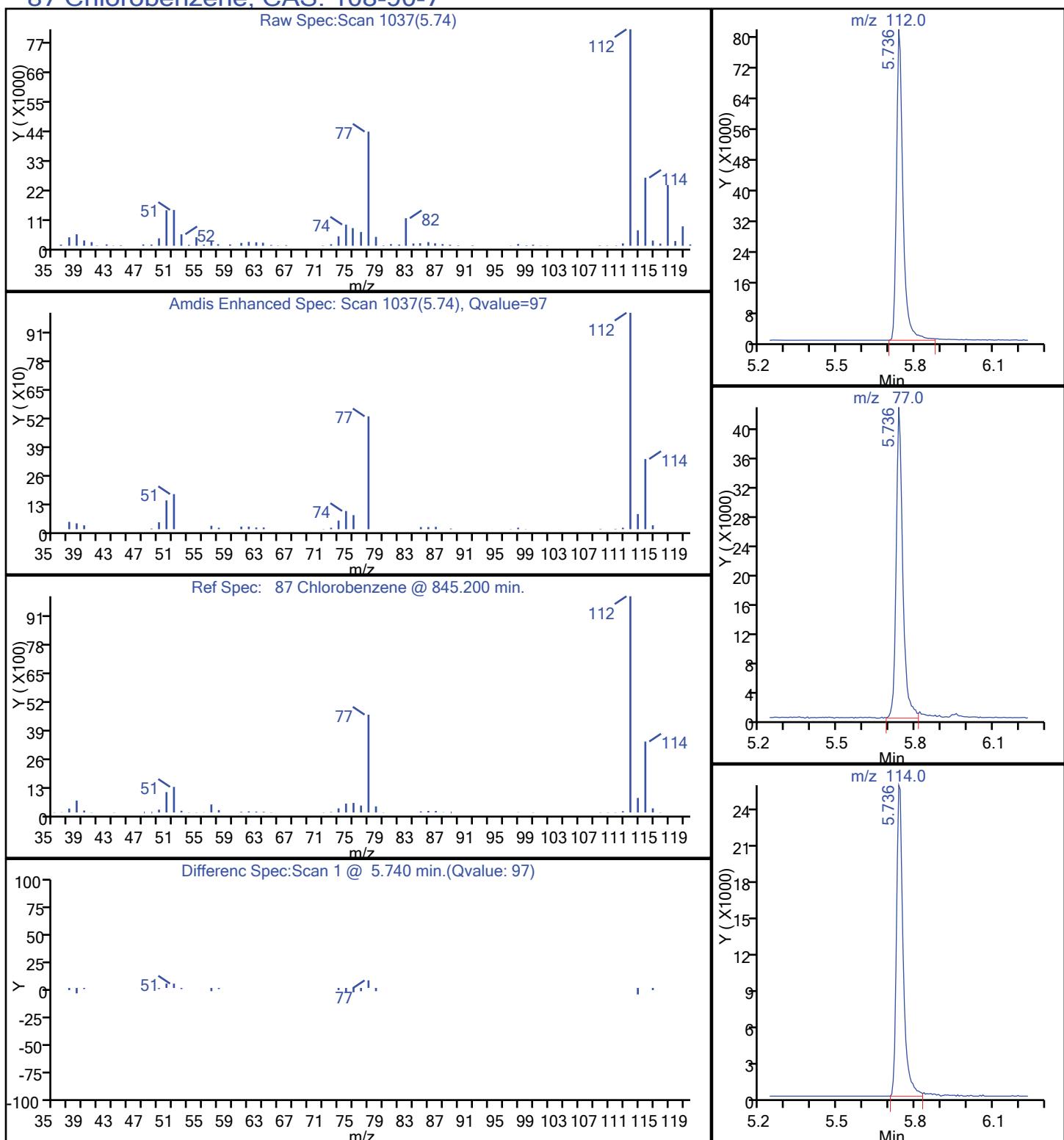
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Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

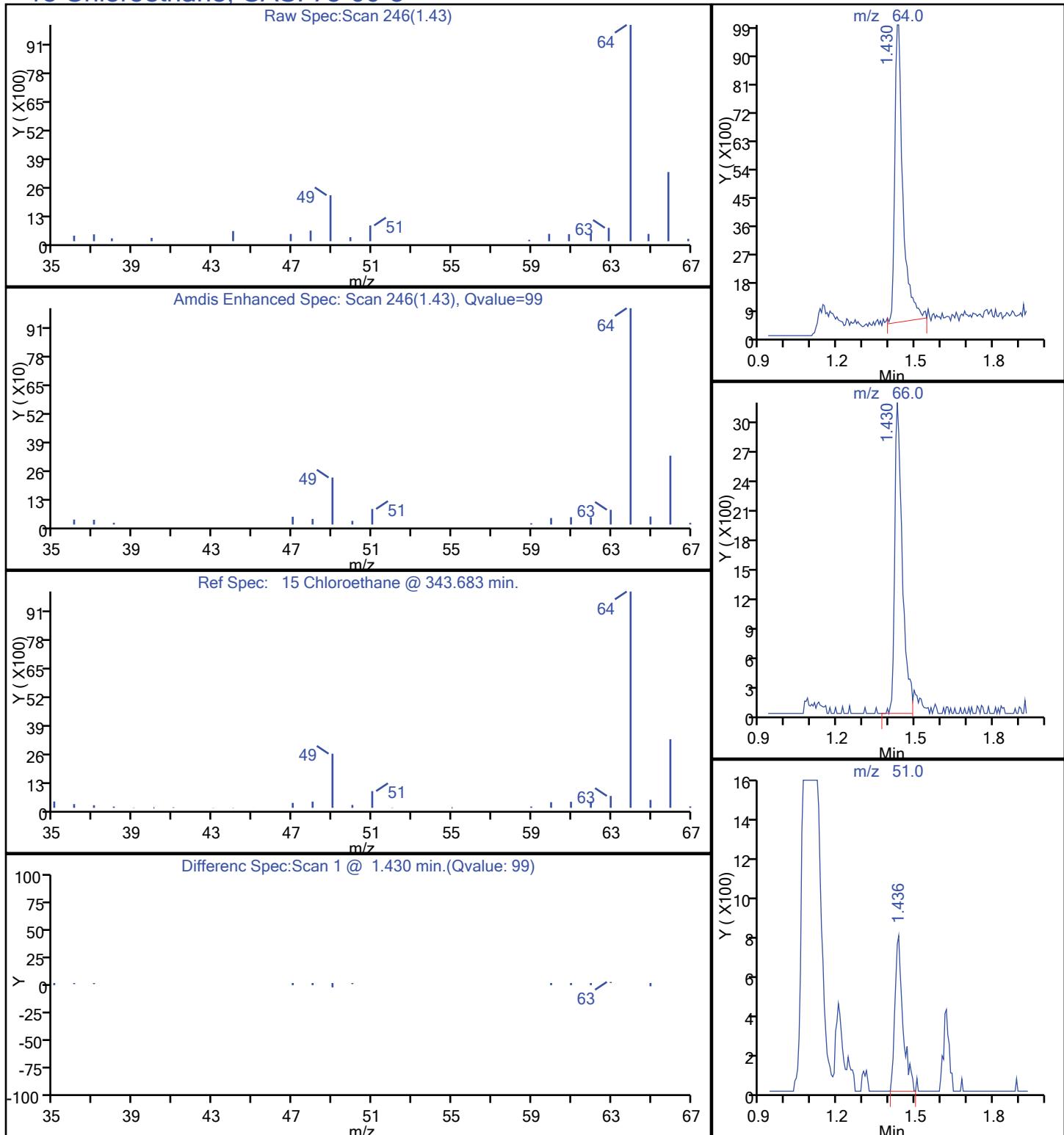
MS SCAN

**87 Chlorobenzene, CAS: 108-90-7**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 15 Chloroethane, CAS: 75-00-3



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

ALS Bottle#: 23 Worklist Smp#: 23

Operator ID: EML

Dil. Factor: 1.0000

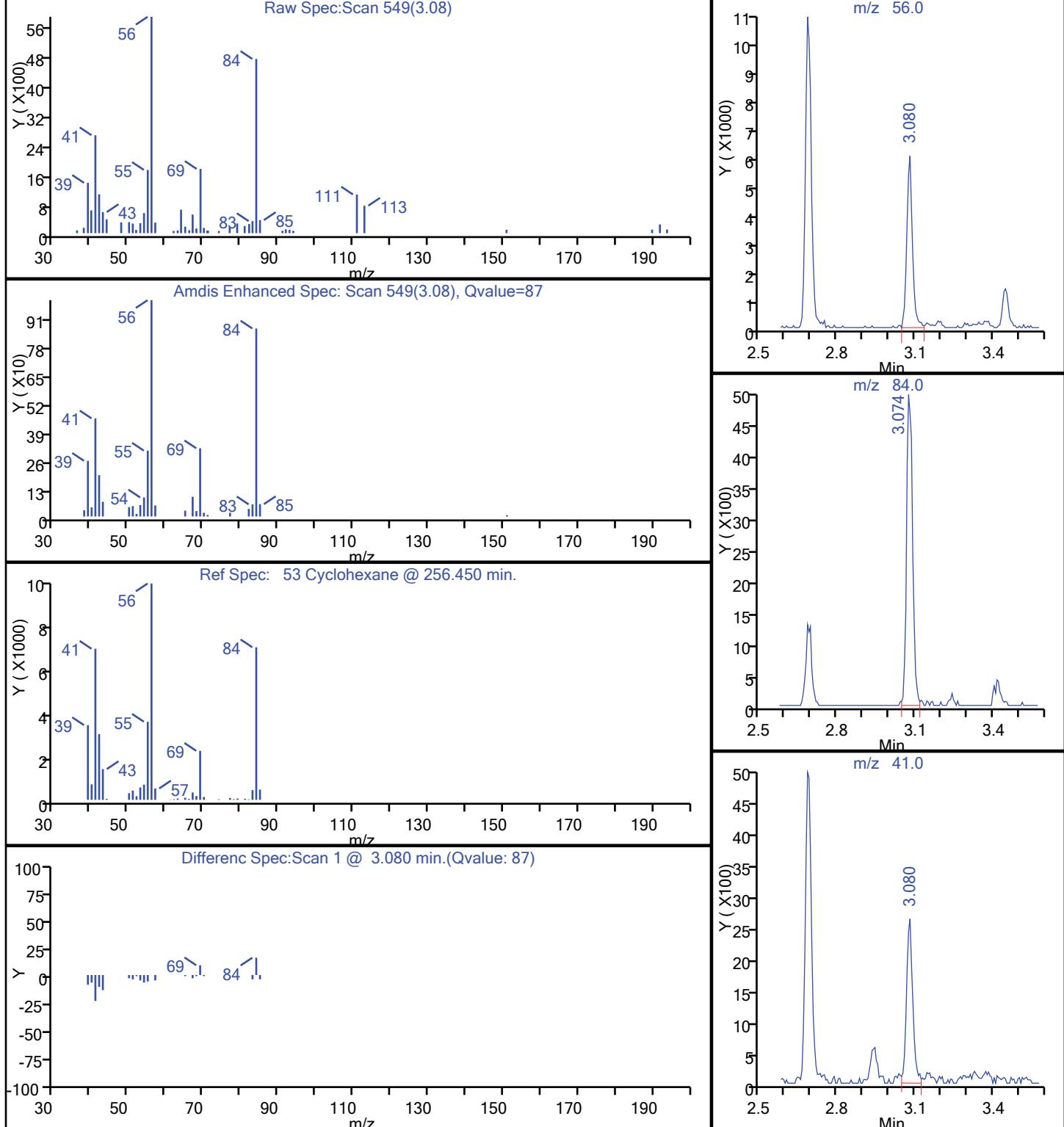
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

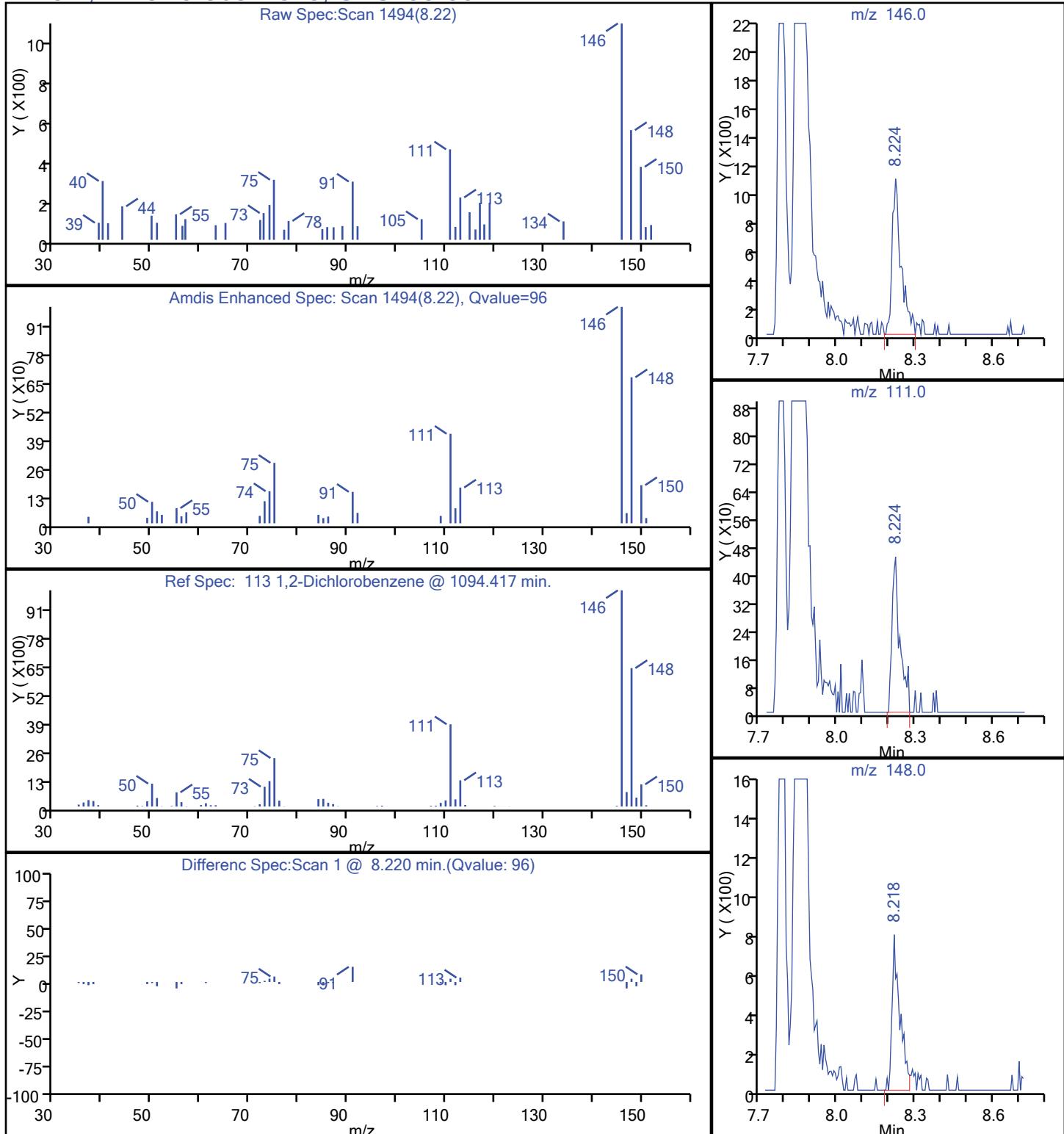
Method: 8260HP32

Detector: MS SCAN

Column:

**53 Cyclohexane, CAS: 110-82-7**

TestAmerica Nashville  
 Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

**113 1,2-Dichlorobenzene, CAS: 95-50-1**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

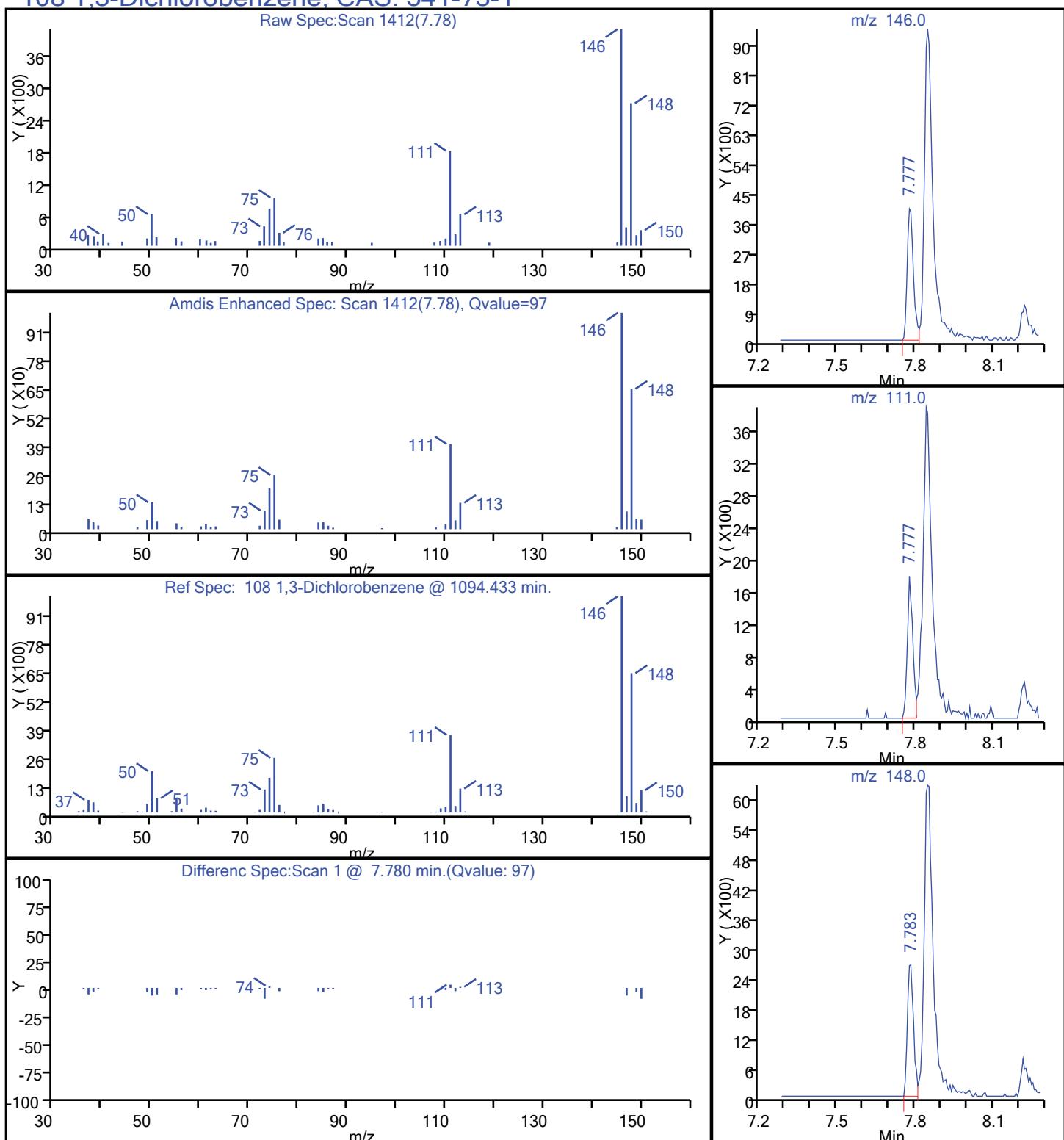
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Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

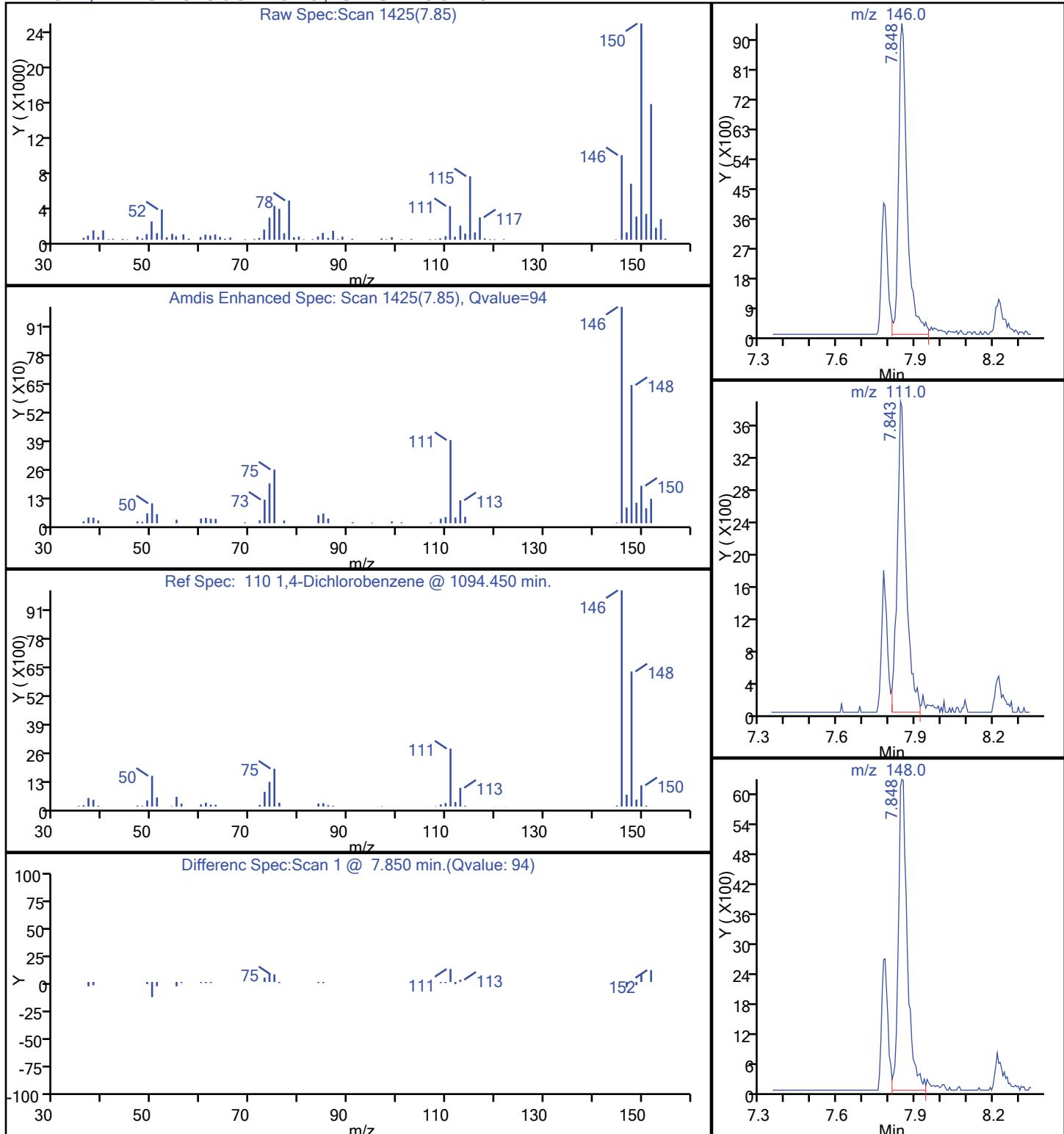
Detector: MS SCAN

**108 1,3-Dichlorobenzene, CAS: 541-73-1**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 110 1,4-Dichlorobenzene, CAS: 106-46-7



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

ALS Bottle#: 23 Worklist Smp#: 23

Operator ID: EML

Dil. Factor: 1.0000

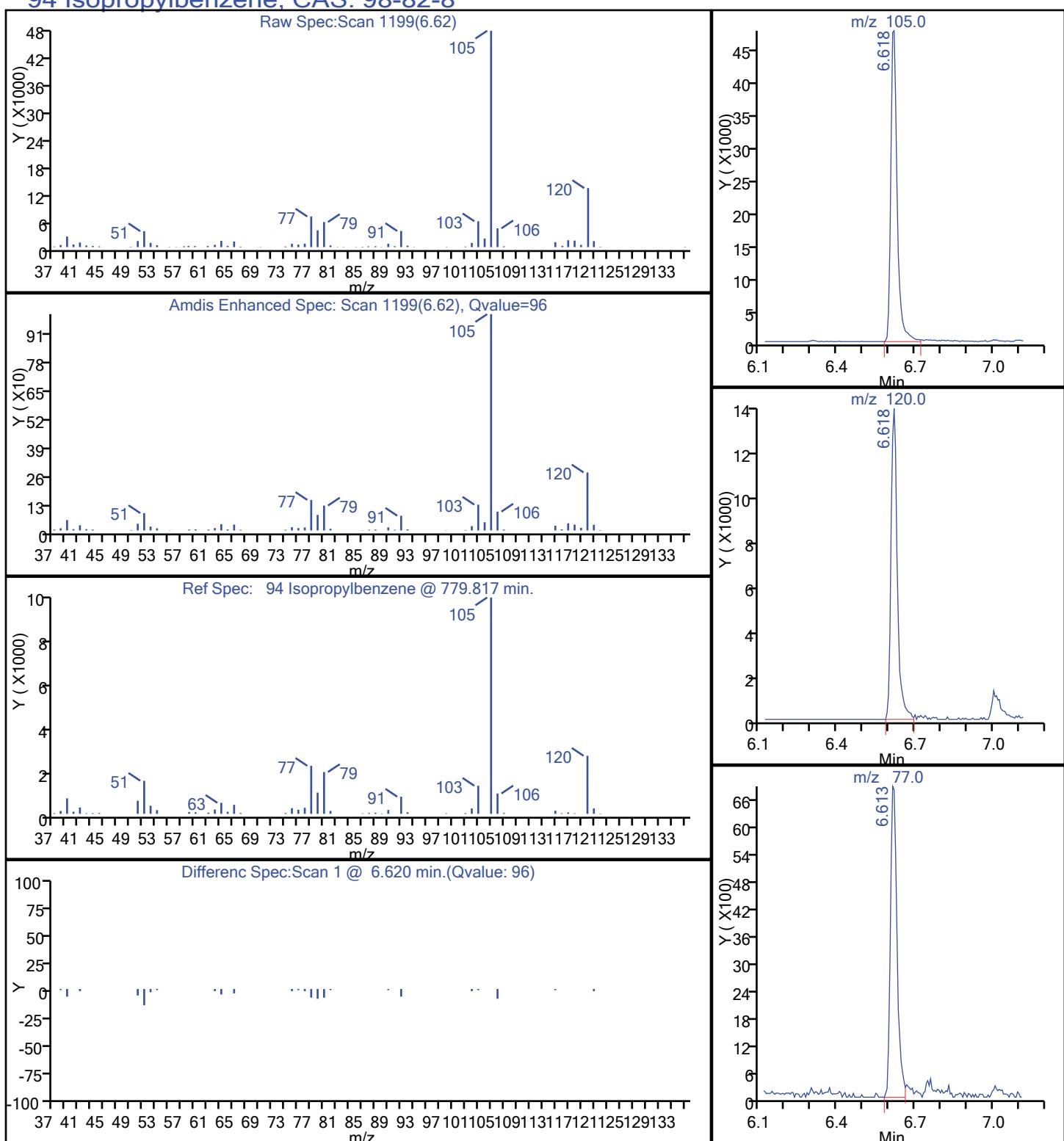
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**94 Isopropylbenzene, CAS: 98-82-8**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

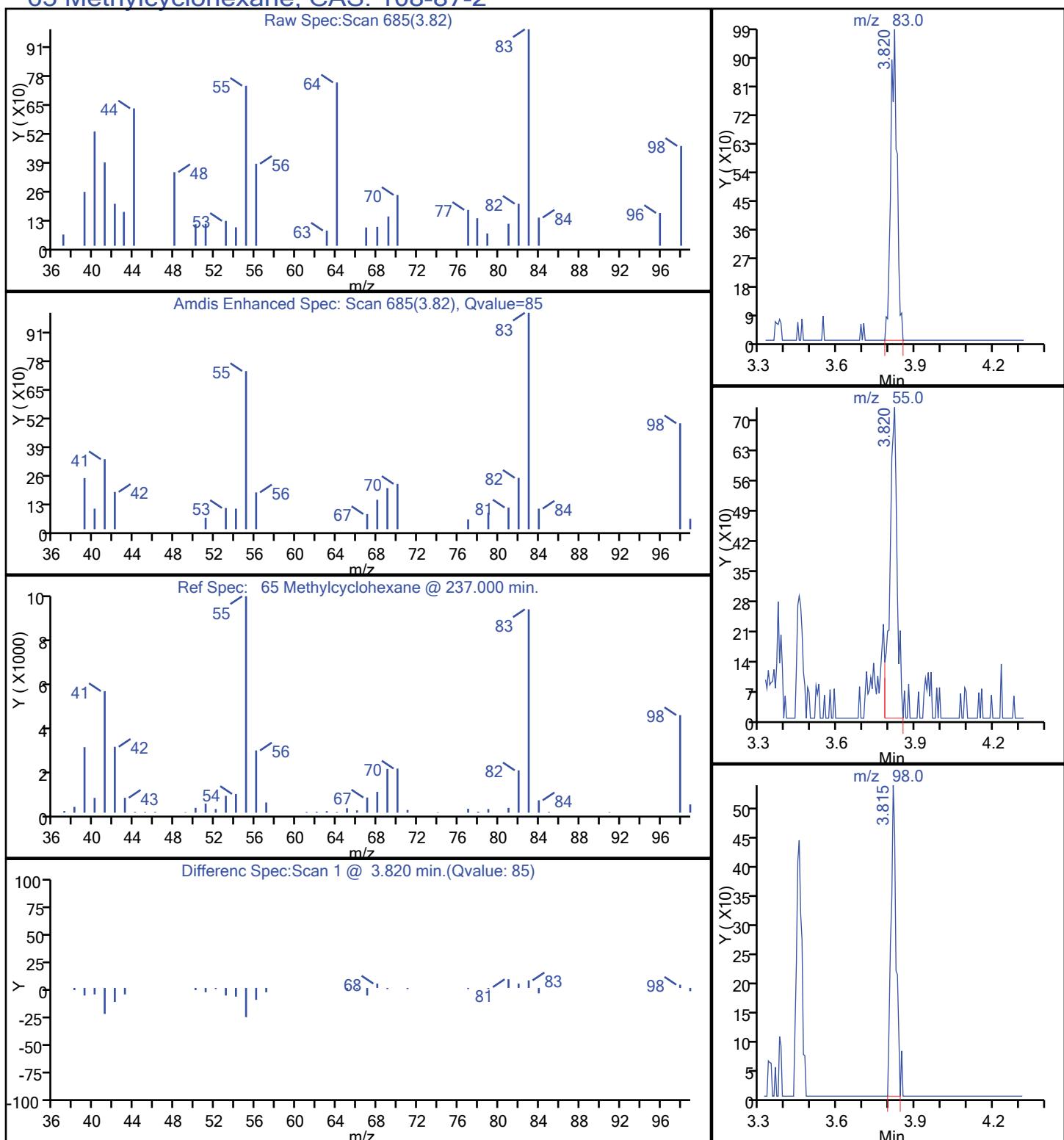
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

MS SCAN

**65 Methylcyclohexane, CAS: 108-87-2**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

ALS Bottle#: 23 Worklist Smp#: 23

Operator ID: EML

Dil. Factor: 1.0000

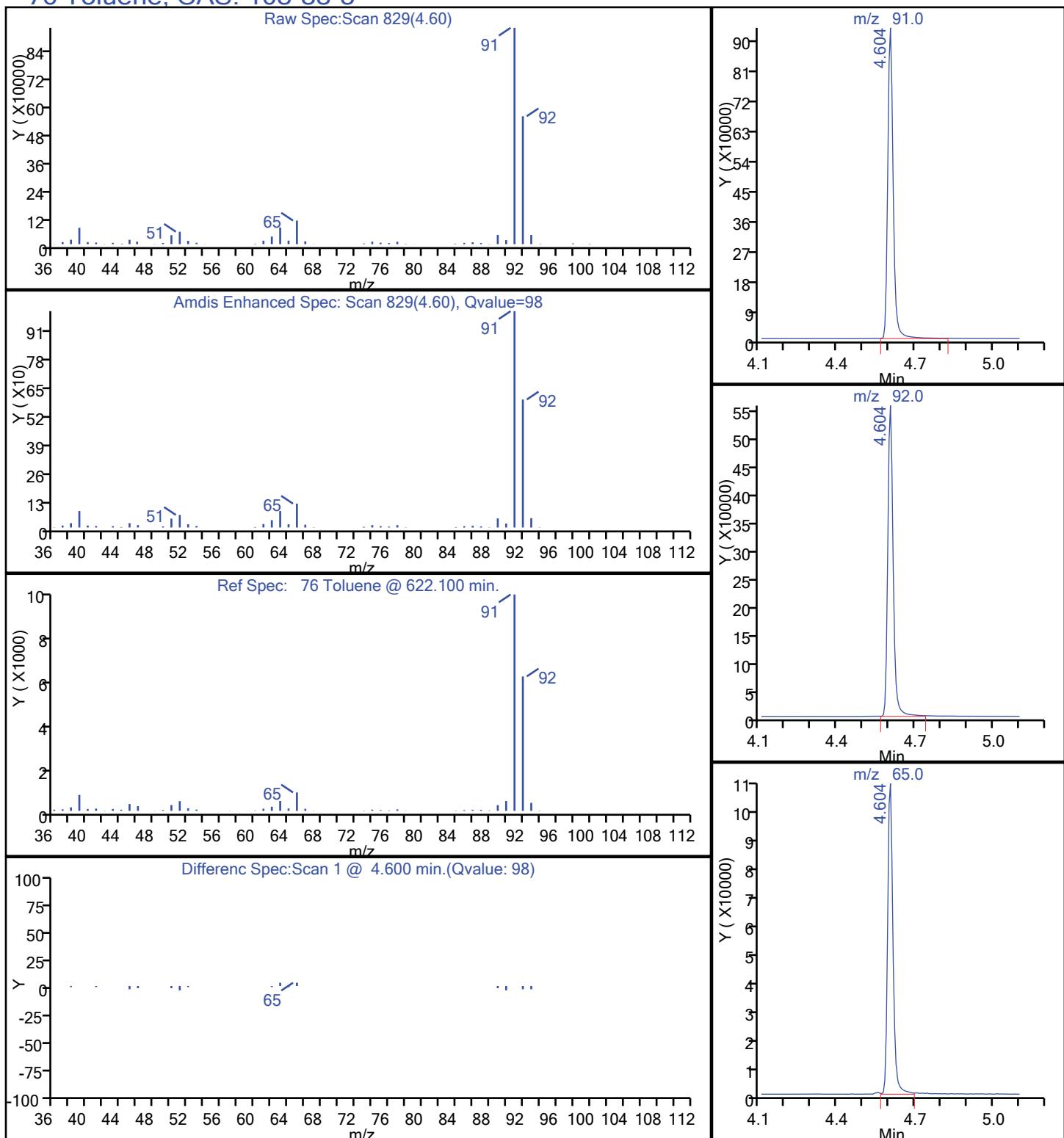
Purge Vol: 10.000 mL

Limit Group: MSV 8260C ICAL

Method: 8260HP32

Detector: MS SCAN

Column:

**76 Toluene, CAS: 108-88-3**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#:

23

Worklist Smp#:

23

Purge Vol: 10.000 mL

Dil. Factor:

1.0000

Method: 8260HP32

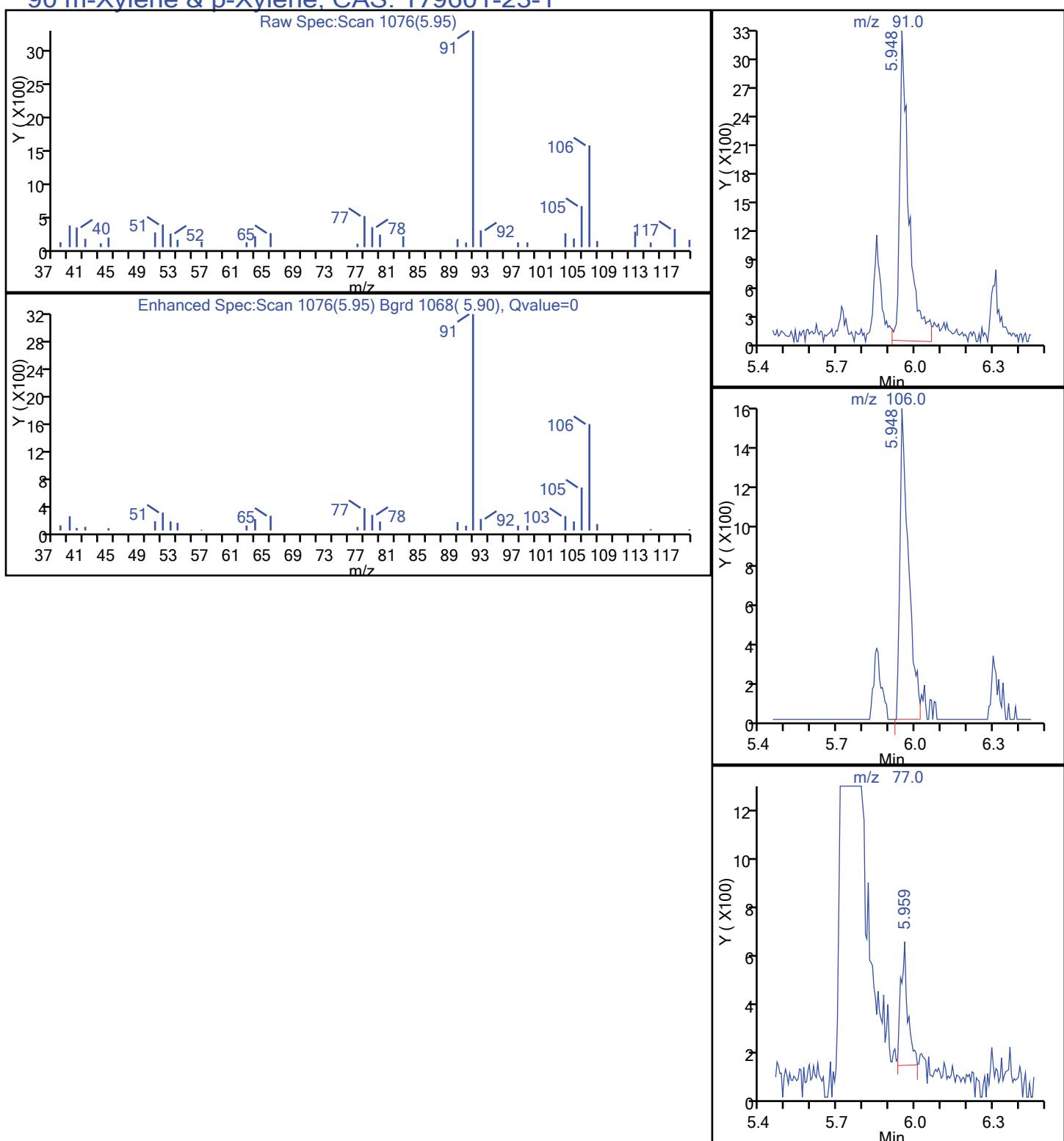
Limit Group:

MSV 8260C ICAL

Column:

Detector

MS SCAN

**90 m-Xylene & p-Xylene, CAS: 179601-23-1**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

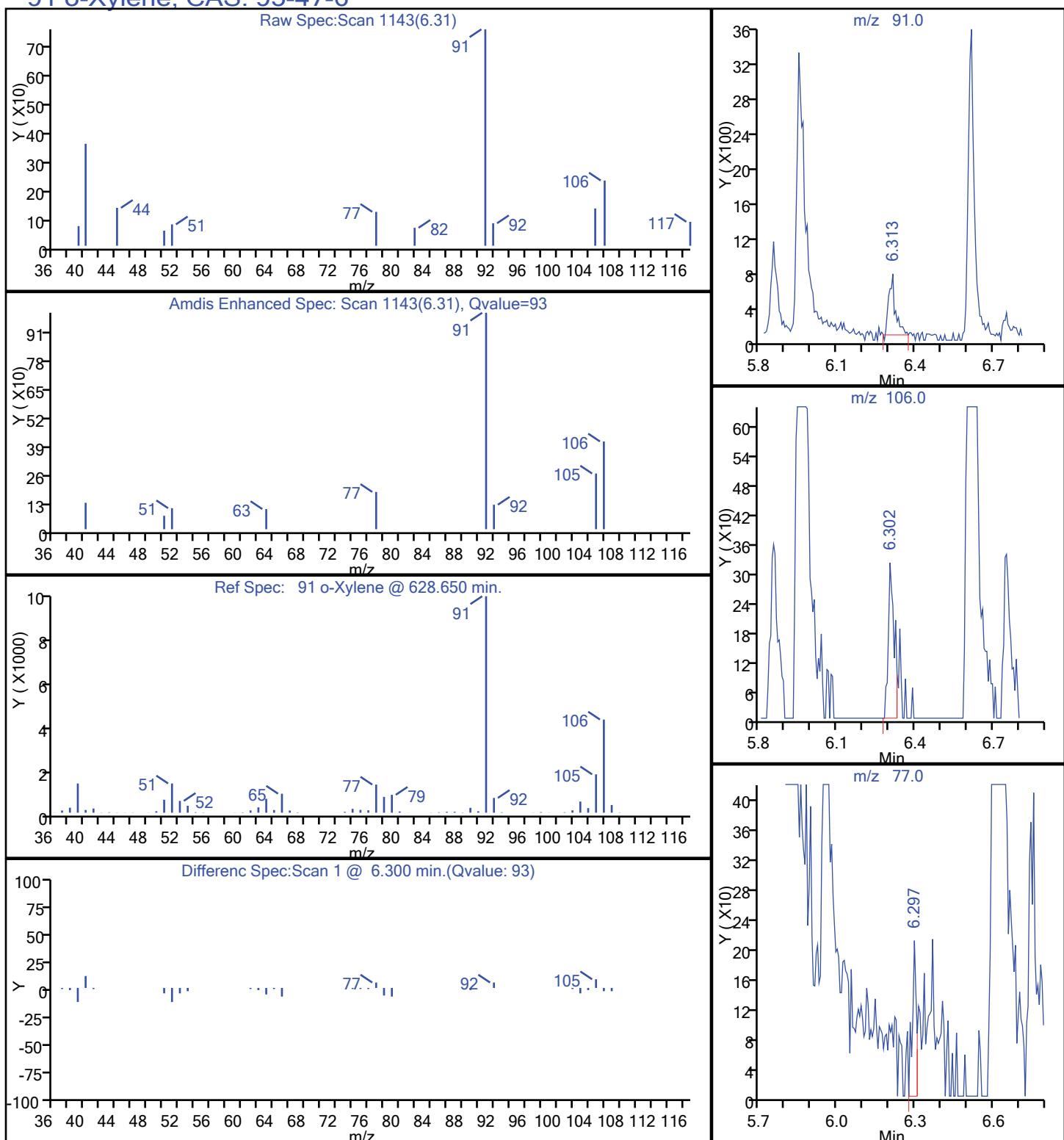
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**91 o-Xylene, CAS: 95-47-6**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

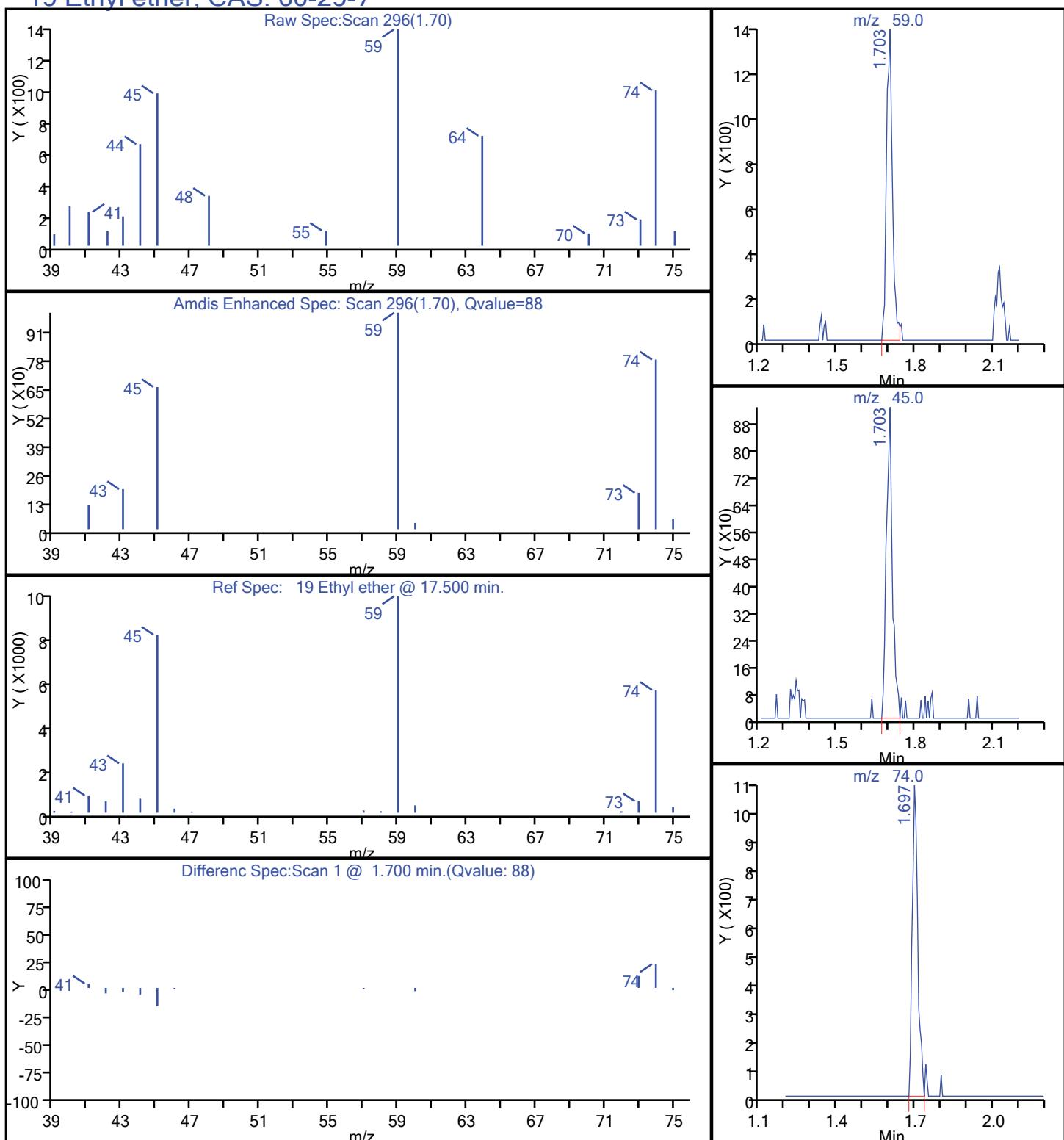
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

MS SCAN

**19 Ethyl ether, CAS: 60-29-7**

TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

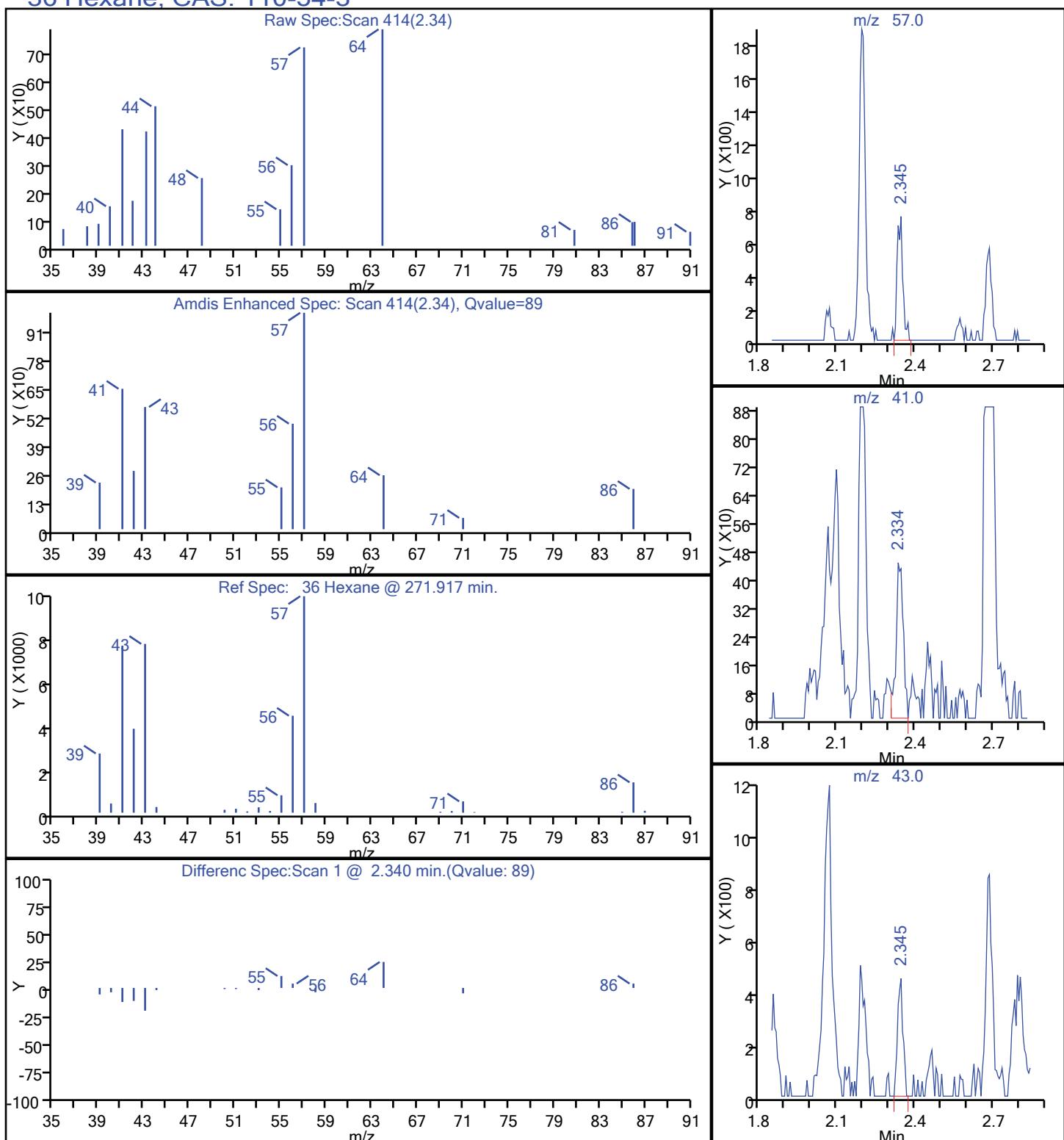
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

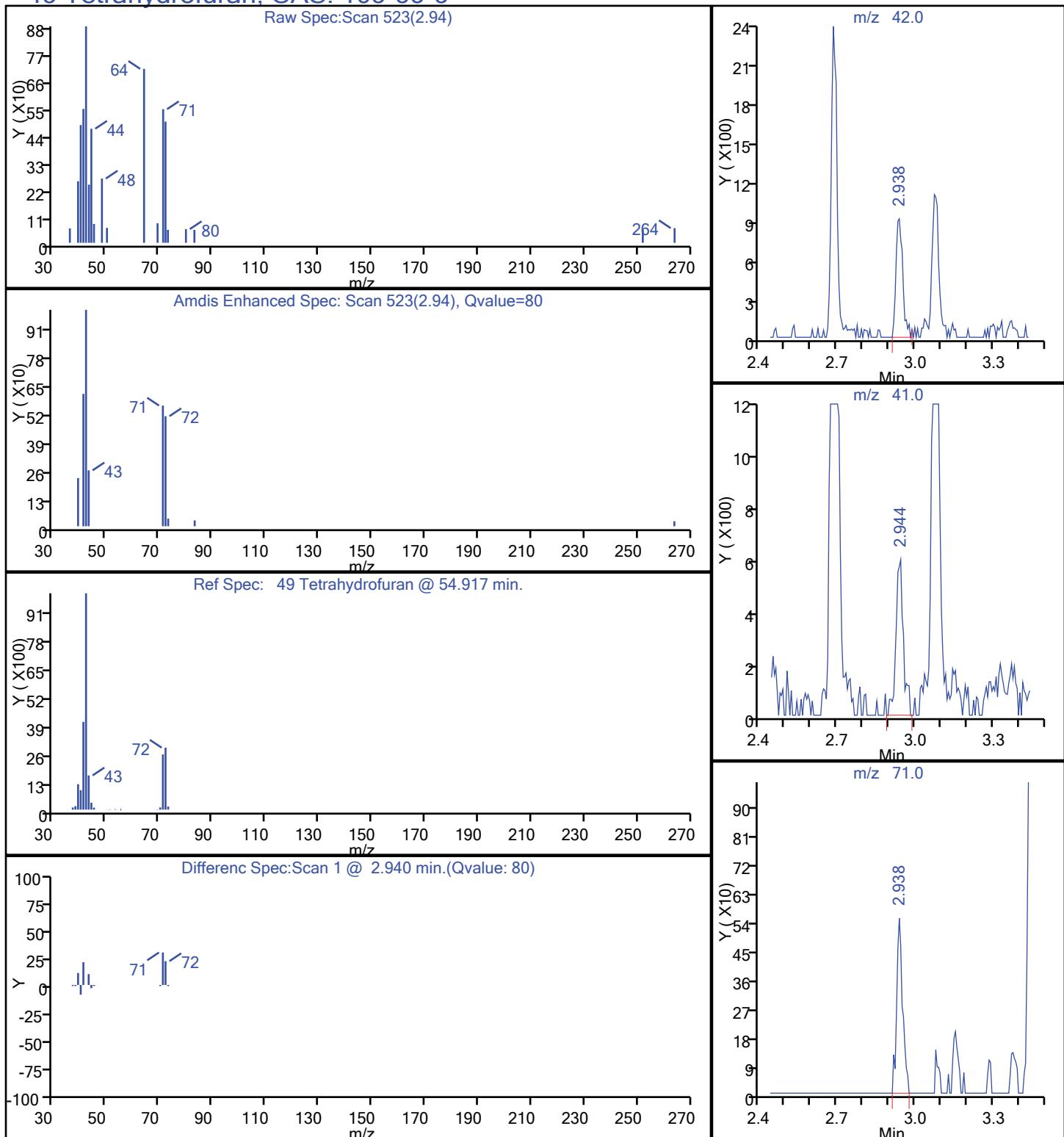
Detector: MS SCAN

**36 Hexane, CAS: 110-54-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

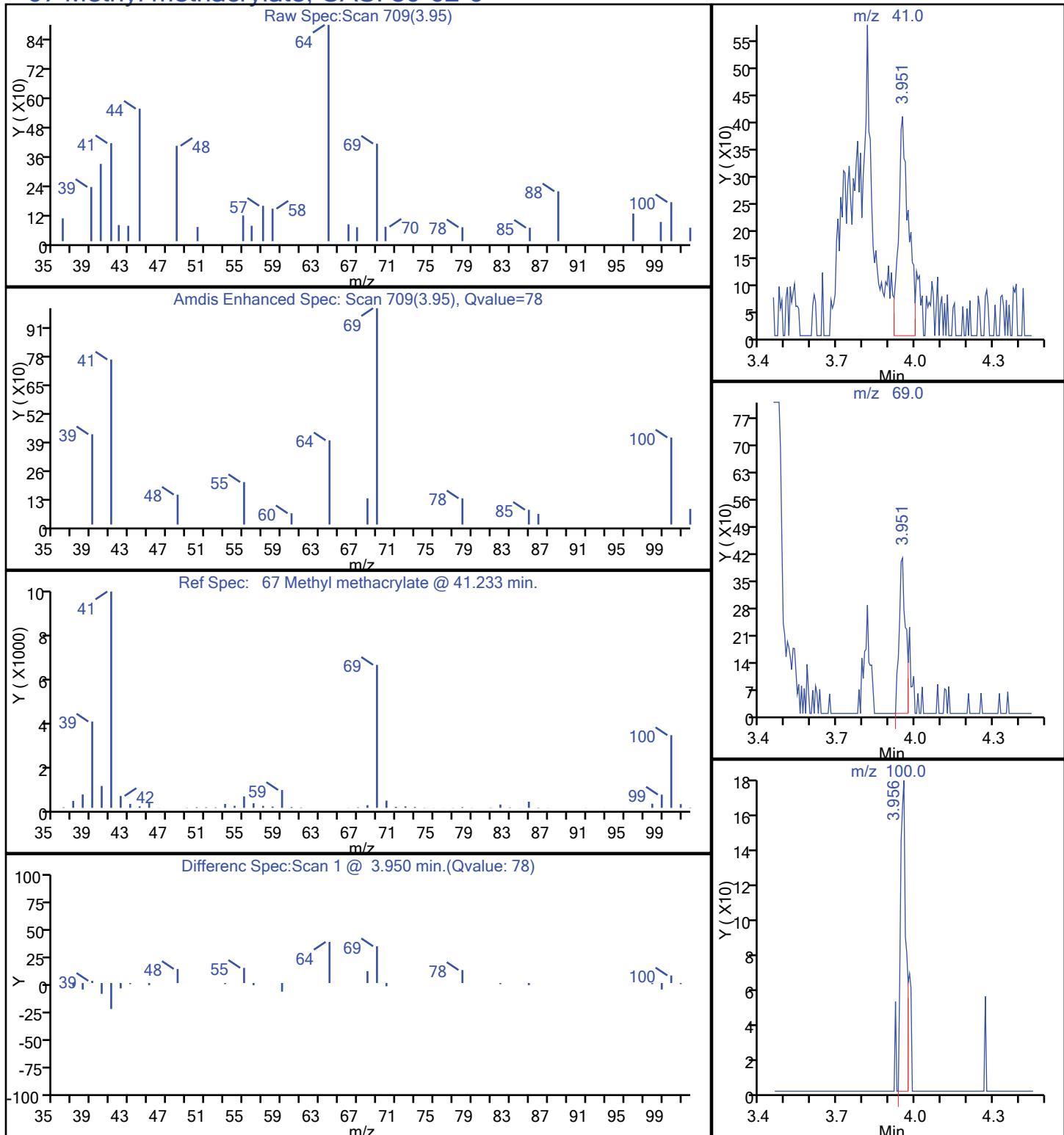
## 49 Tetrahydrofuran, CAS: 109-99-9



## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 67 Methyl methacrylate, CAS: 80-62-6



Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

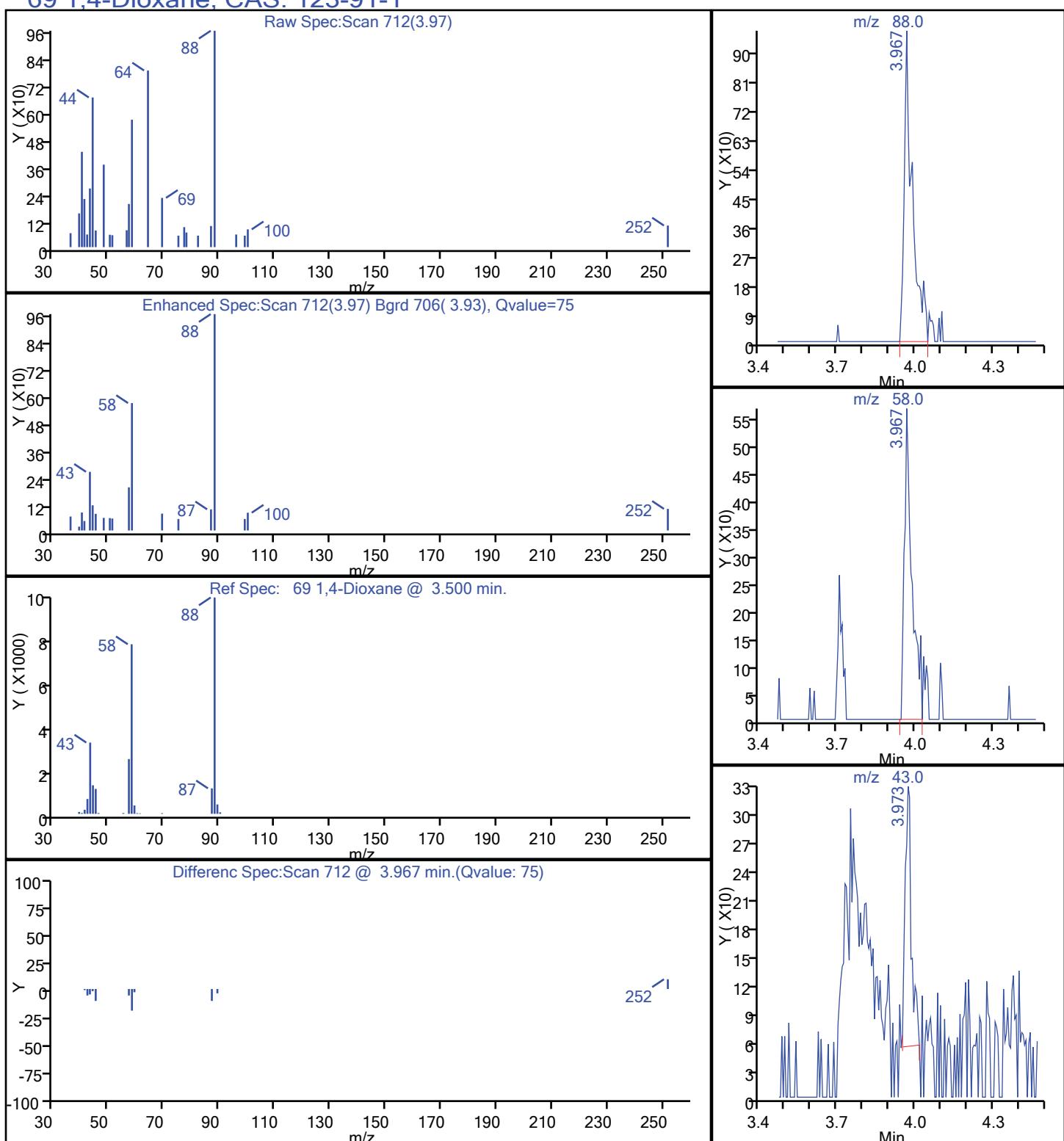
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column: Detector

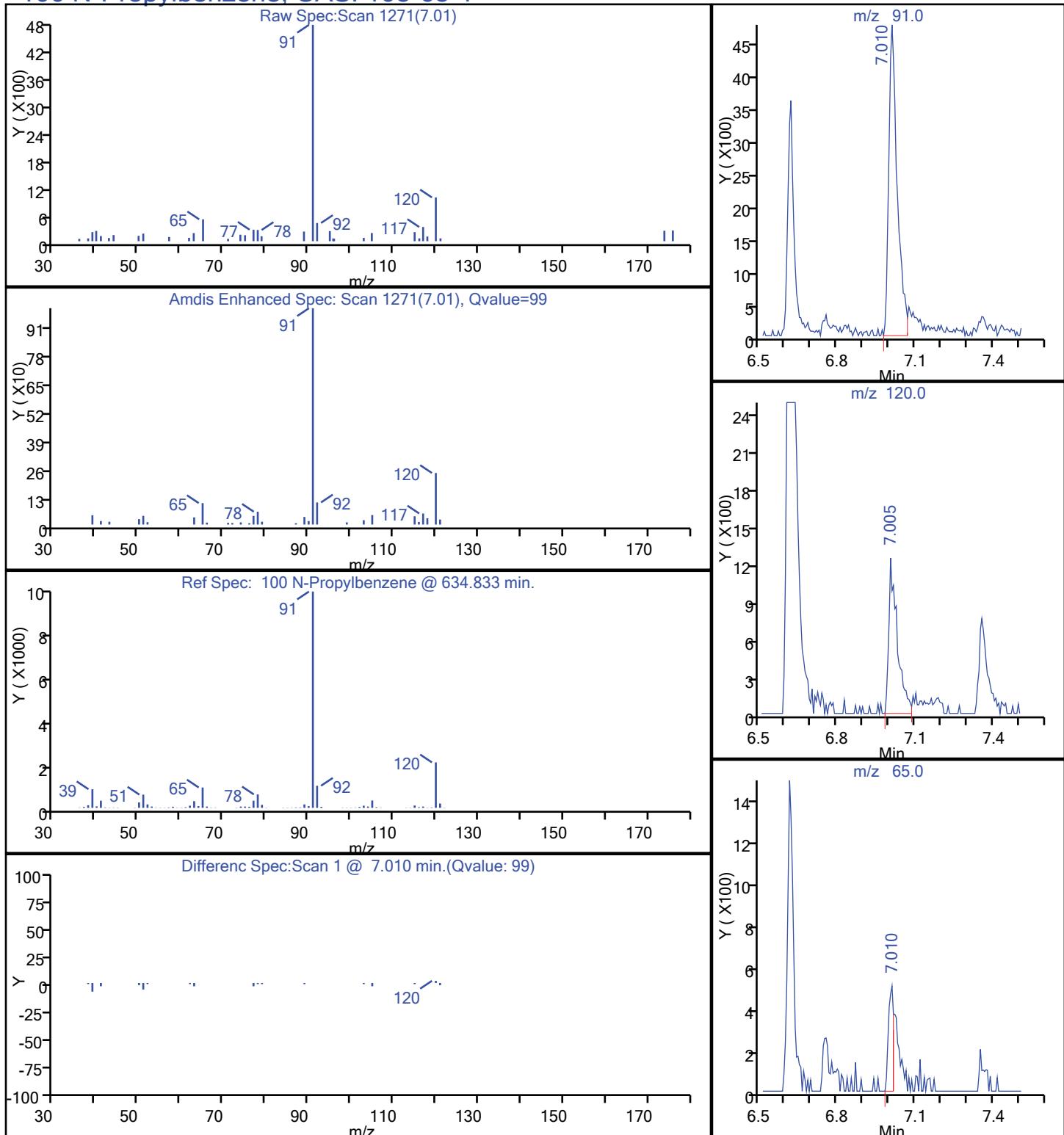
MS SCAN

**69 1,4-Dioxane, CAS: 123-91-1**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

## 100 N-Propylbenzene, CAS: 103-65-1



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D

Injection Date: 05-Jun-2015 21:15:30

Instrument ID: HP32

Lims ID: 490-79781-A-9

Lab Sample ID: 490-79781-9

Client ID: PMP-230-060315

Operator ID: EML

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 10.000 mL

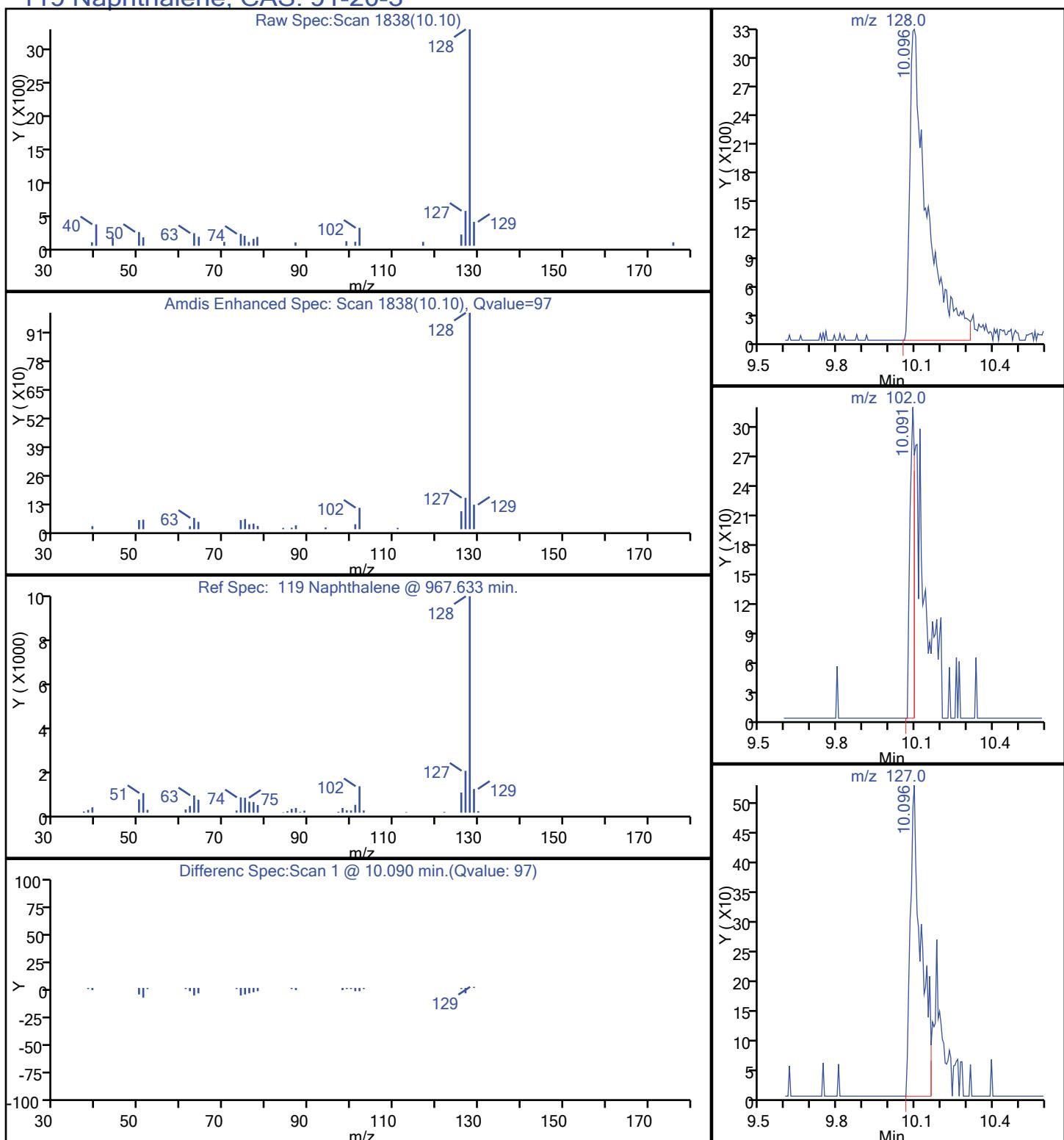
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

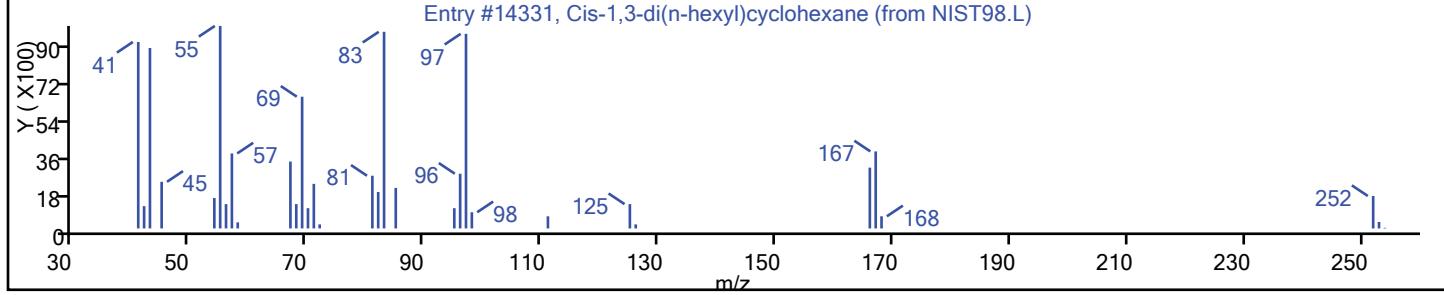
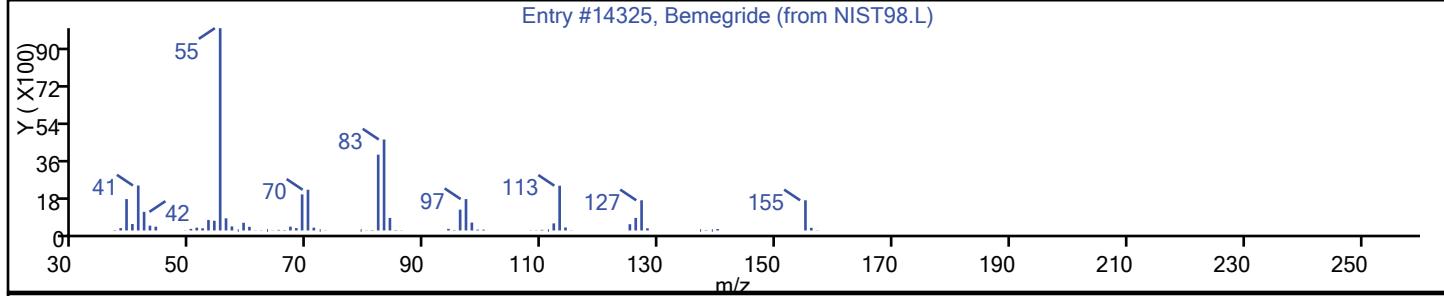
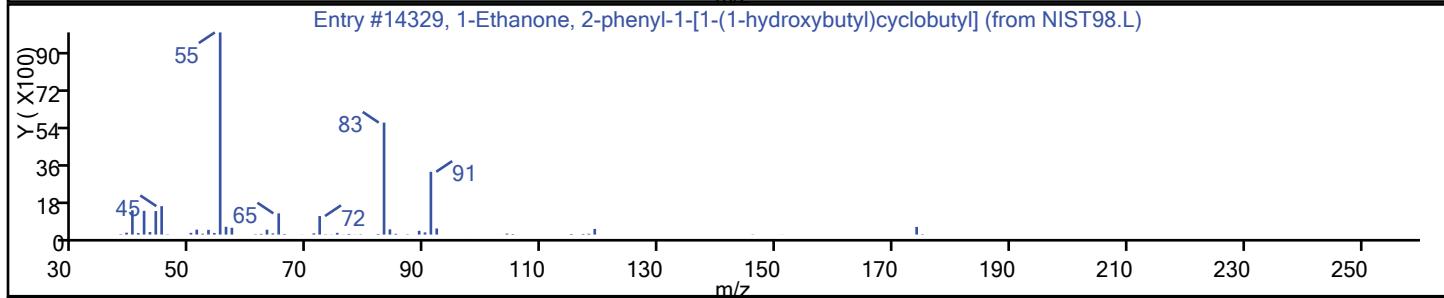
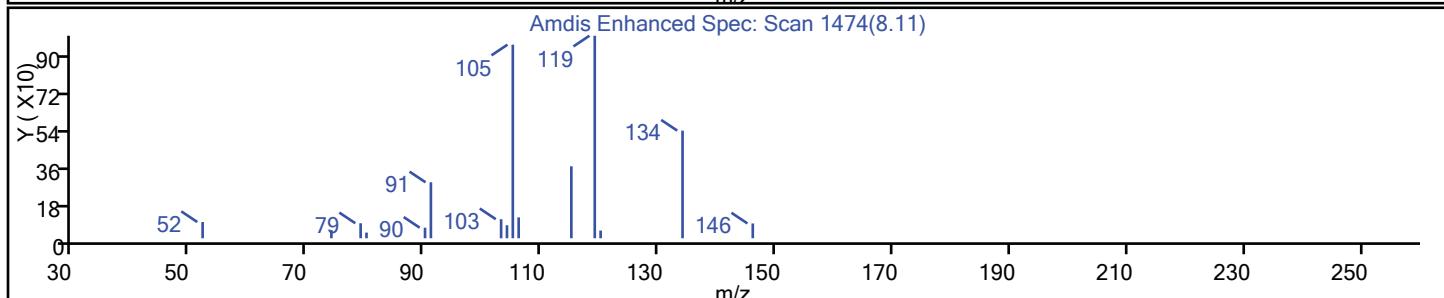
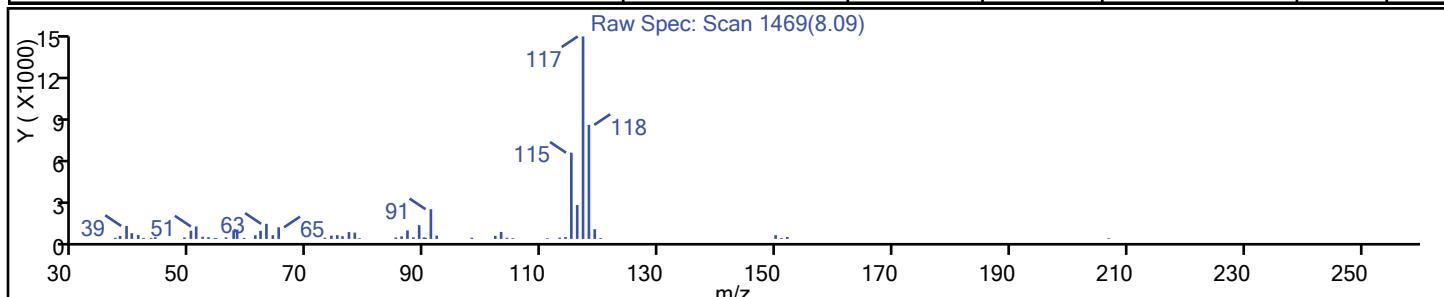
Detector: MS SCAN

**119 Naphthalene, CAS: 91-20-3**

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-23.D  
 Injection Date: 05-Jun-2015 21:15:30 Instrument ID: HP32  
 Lims ID: 490-79781-A-9 Lab Sample ID: 490-79781-9  
 Client ID: PMP-230-060315  
 Operator ID: EML ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2-diethyl-	135-01-3	NIST98	14329	C10H14	134	80
Benzene, 1,4-diethyl-	105-05-5	NIST98.L	14325	C10H14	134	72
Benzene, 1,3-diethyl-	141-93-5	NIST98.L	14331	C10H14	134	72



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79781-10

Matrix: Water

Lab File ID: 060515-11.D

Analysis Method: 8260C

Date Collected: 06/02/2015 00:01

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 15:35

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79781-10

Matrix: Water

Lab File ID: 060515-11.D

Analysis Method: 8260C

Date Collected: 06/02/2015 00:01

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 15:35

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	114		70-130
1868-53-7	Dibromofluoromethane (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	113		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: Trip Blank

Lab Sample ID: 490-79781-10

Matrix: Water

Lab File ID: 060515-11.D

Analysis Method: 8260C

Date Collected: 06/02/2015 00:01

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 15:35

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

Number TICs Found: 0

TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-11.D  
 Lims ID: 490-79781-A-10 Lab Sample ID: 490-79781-10  
 Client ID: Trip Blank  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 15:35:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-10  
 Misc. Info.: 490-0056059-011  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 13:11:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.447	0.005	99	352258	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	279198	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.828	7.823	0.005	94	119495	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.028	-0.001	94	86083	25.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.240	-0.001	0	78594	26.3	
\$ 6 Toluene-d8 (Surr)	98	4.557	4.552	0.005	92	390927	28.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.756	6.751	0.005	96	100616	28.5	
23 Acetone	58	1.846	1.846	0.000	96	533	2.96	
42 cis-1,2-Dichloroethene	61	2.755	2.745	0.010	72	727	0.1241	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

TestAmerica Nashville  
Tentatively Identified Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-11.D  
 Lims ID: 490-79781-A-10 Lab Sample ID: 490-79781-10  
 Client ID: Trip Blank  
 Sample Type: Client  
 Inject. Date: 05-Jun-2015 15:35:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-A-10  
 Misc. Info.: 490-0056059-011  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Last Update: 08-Jun-2015 15:41:57 Calib Date: 18-May-2015 20:46:30  
 Tic RT Window: 0.000 -0.000 Response: area  
 Quant By: Nearest ISTD Quant LOD: 10.00000  
 MS Library: \\ChromNA\Nashville\Database\NIST98.L  
 Min. Match: 50

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 13:11:30

## Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
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BFB 6.756 100616

**Reagents:**

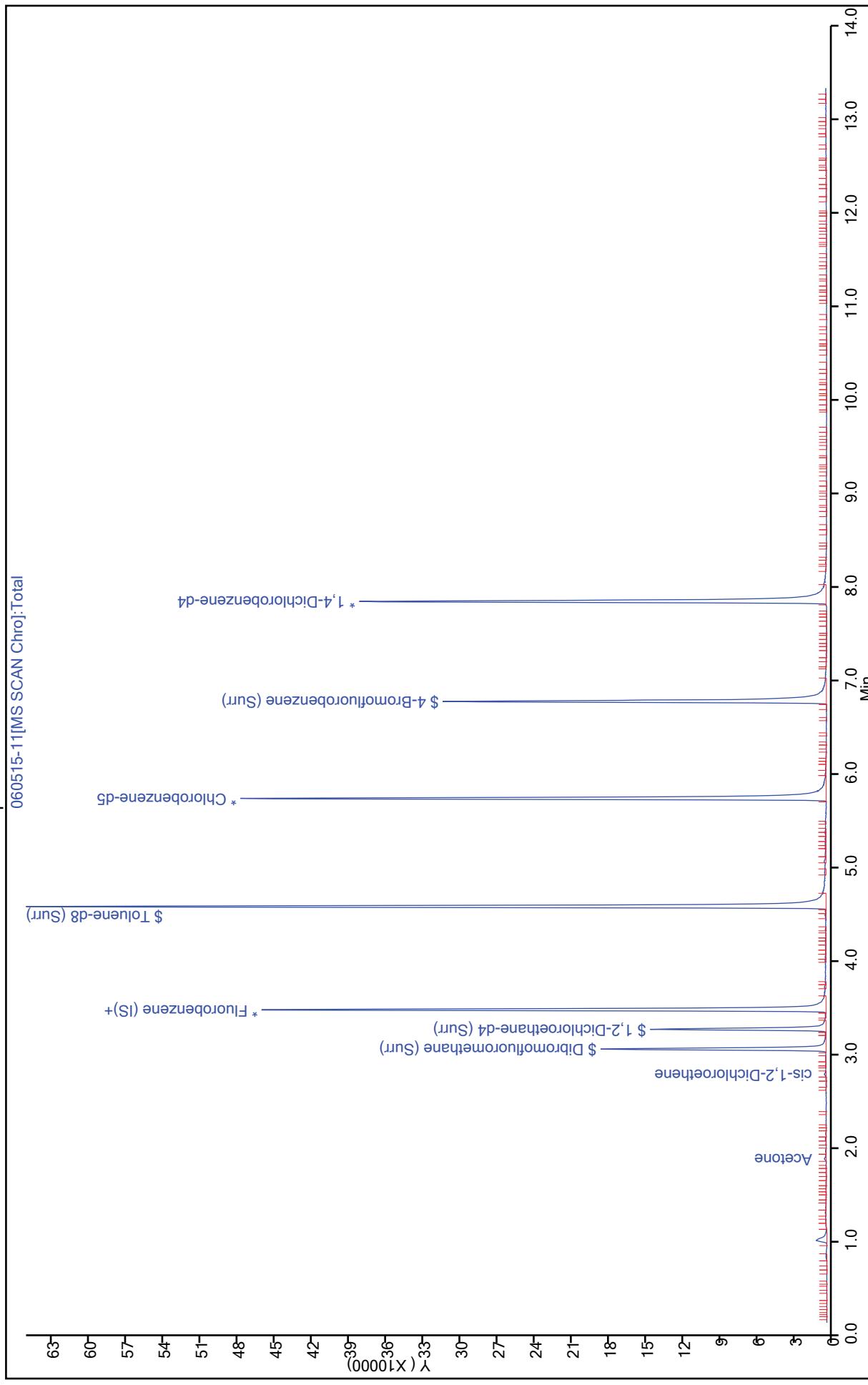
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 13:11:31

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-11.D  
Injection Date: 05-Jun-2015 15:35:30  
Lims ID: 490-79781-A-10  
Client ID: Trip Blank  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 11  
Instrument ID: HP32  
Lab Sample ID: 490-79781-10  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Client Sample ID: Trip Blank Lab Sample ID: 490-79781-10  
Matrix: Water Lab File ID: 060815-19.D  
Analysis Method: 8260C Date Collected: 06/02/2015 00:01  
Sample wt/vol: 10 (mL) Date Analyzed: 06/08/2015 18:42  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 254379 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	3.3	J	5.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	110		70-130
1868-53-7	Dibromofluoromethane (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-19.D  
 Lims ID: 490-79781-B-10 Lab Sample ID: 490-79781-10  
 Client ID: Trip Blank  
 Sample Type: Client  
 Inject. Date: 08-Jun-2015 18:42:30 ALS Bottle#: 19 Worklist Smp#: 17  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-B-10  
 Misc. Info.: 490-0056175-017  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:55:38 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:11:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.453	3.450	0.003	99	413227	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.714	-0.002	83	303513	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.821	0.003	94	149476	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.025	0.003	94	97878	24.6	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.237	0.004	0	84010	24.0	
\$ 6 Toluene-d8 (Surr)	98	4.558	4.555	0.003	92	392940	26.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.748	0.004	95	121147	27.4	
23 Acetone	58	1.847	1.844	0.003	97	684	3.35	
44 2-Butanone (MEK)	72	2.783	2.764	0.019	57	201	0.8305	

**Reagents:**

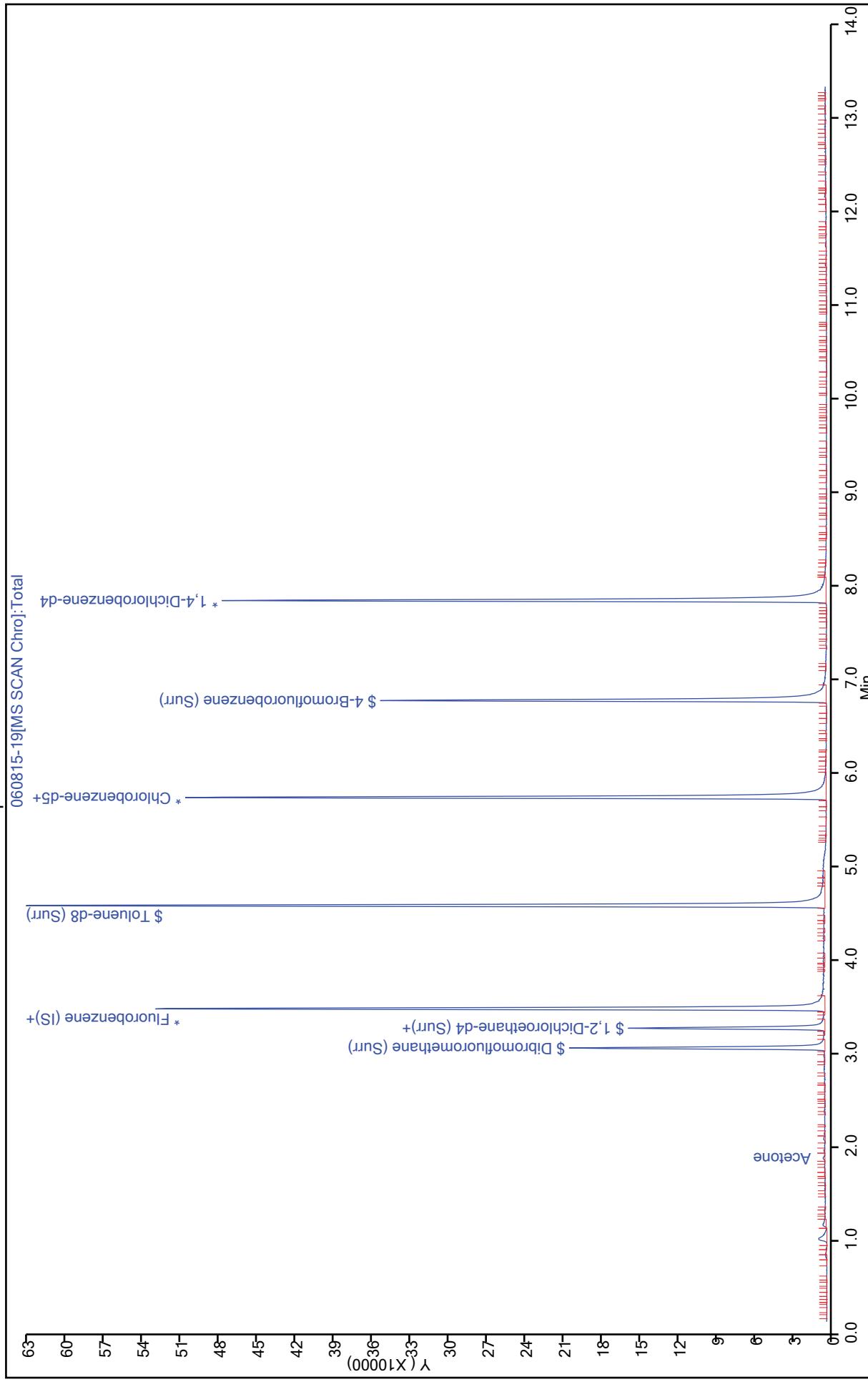
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 10:11:39

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-19.D  
Injection Date: 08-Jun-2015 18:42:30  
Lims ID: 490-79781-B-10  
Client ID:  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 17  
Instrument ID: HP32  
Lab Sample ID: 490-79781-10  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL  
ALS Bottle#: 19



TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-19.D

Injection Date: 08-Jun-2015 18:42:30

Instrument ID: HP32

Lims ID: 490-79781-B-10

Lab Sample ID: 490-79781-10

Client ID: Trip Blank

Operator ID: EML

ALS Bottle#: 19 Worklist Smp#: 17

Purge Vol: 10.000 mL

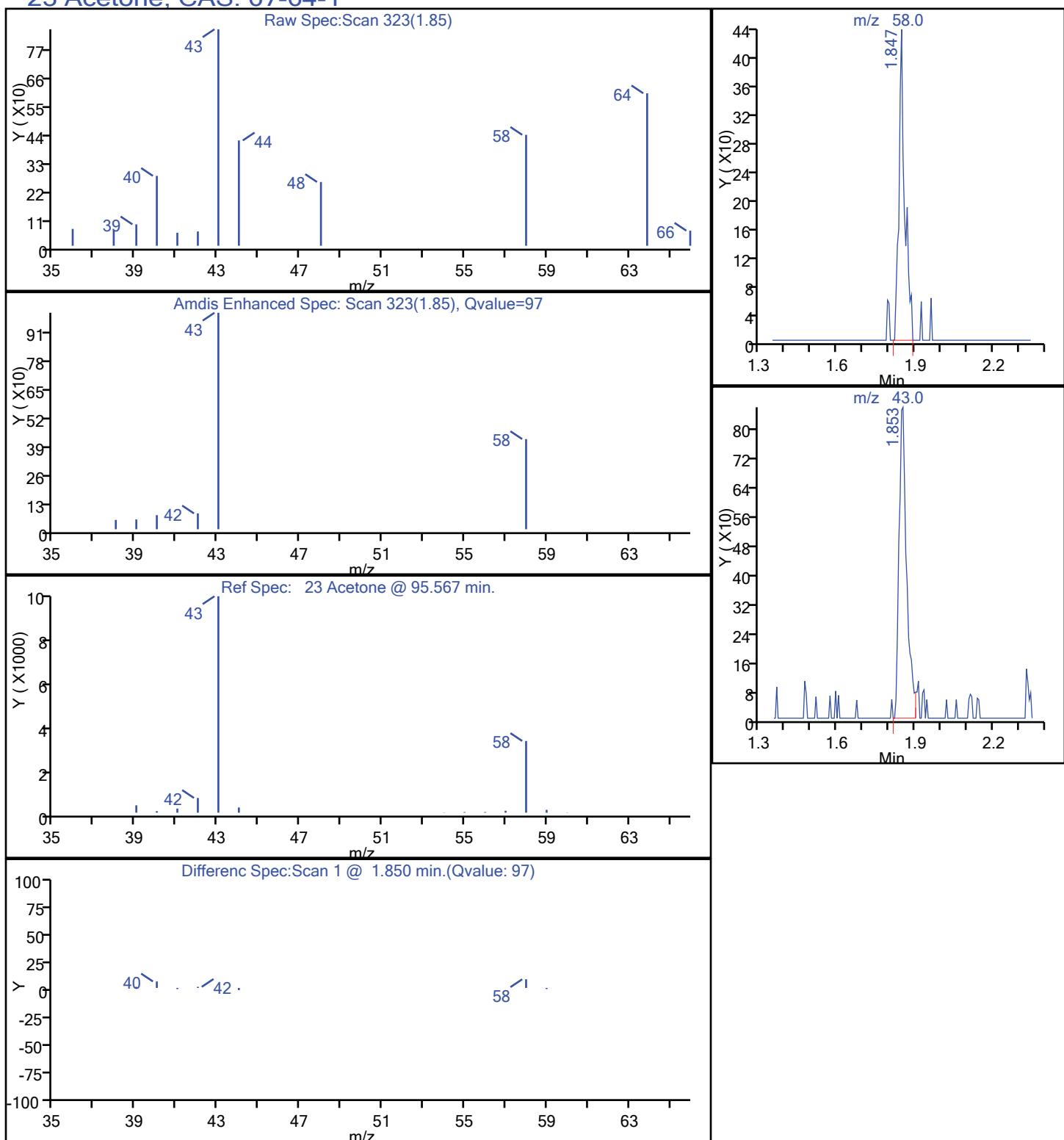
Dil. Factor: 1.0000

Method: 8260HP32

Limit Group: MSV 8260C ICAL

Column:

Detector: MS SCAN

**23 Acetone, CAS: 67-64-1**

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

## Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0005 490-249241/2	051815-18.D
Level 2	STD001 490-249241/3	051815-19.D
Level 3	STD002 490-249241/4	051815-20.D
Level 4	STD010 490-249241/5	051815-21.D
Level 5	STD020 490-249241/6	051815-22.D
Level 6	ICIS 490-249241/7	051815-23.D
Level 7	STD100 490-249241/8	051815-24.D
Level 8	STD200 490-249241/9	051815-25.D

ANALYTE	RRF				CURVE TYPE	COEFFICIENT		# MIN RRF	% RSD	# MAX R^2 OR COD	# MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4		B	M1				
Dichlorodifluoromethane	0.2650 0.2798	0.3187 0.2794	0.2870 0.2658	0.2932 0.2511	0.2832 Ave	0.2405	0.0558	0.2840		0.1000	6.0
Chloromethane	0.3469 0.2405	0.3058 0.2355	0.2915 0.2415	0.2511 0.2415	Lin2	0.0558	0.2434			0.1000	
Vinyl chloride	0.3308 0.2682	0.2913 0.2722	0.2765 0.2689	0.2744 0.2682	Ave		0.2813			0.1000	7.6
Butadiene	0.2834 0.2490	0.2512 0.2534	0.2438 0.2399	0.2426 0.2399	Ave	0.2403	0.2505			0.1000	5.7
Bromomethane	0.2416 0.1953	0.2217 0.1953	0.1938 +++++	0.1892 0.1871	Ave	0.2034				0.1000	10.0
Chloroethane	0.2790 0.1791	0.2396 0.1895	0.1892 0.1787	0.1756 0.1787	Lin2	0.0512	0.1780			0.1000	20.0
Dichlorofluoromethane	0.4805 0.4492	0.4528 0.4563	0.4131 0.4467	0.4567 0.4467	Ave	0.4475	0.4503			0.1000	4.1
Trichlorofluoromethane	0.5641 0.4566	0.4757 0.4630	0.4735 0.4276	0.4599 0.4580	Ave	0.4485	0.4711			0.1000	8.6
Ethanol	0.0009 0.0005	0.0007 0.0004	0.0005 +++++	0.0004 0.0004	Lin2	0.0005	0.0004	*	*	0.0010	
Ethyl ether	0.1844 0.1534	0.1528 0.1597	0.1537 0.1580	0.1515 0.1521	Ave	0.4475	0.4782			0.1000	6.9
Acrolein	+++++ 0.0181	0.0203 0.0185	0.0190 0.0187	0.0177 0.0187	Ave	0.0164	0.0184			0.0100	6.6
Freon-113	0.3159 0.2741	0.2981 0.2792	0.2821 0.2833	0.2741 0.2529	Ave	0.2709	0.2847			0.1000	5.3
1,1-Dichloroethene	0.2971 0.2515	0.2767 0.2605	0.2534 0.2529	0.2526 0.2529	Ave	0.2496	0.2618			0.1000	6.4
Acetone	0.0132 0.0086	0.0116 0.0091	0.0109 0.0095	0.0099 0.0095	Lin2	0.0091	0.0093	*	*	0.0100	

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	RRF				CURVE COEFFICIENT		#	MIN RRF	% RSD	#	MAX % RSD	R^2	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 5	B	M1								
Iodomethane	0.3807 0.3928	0.3606 0.3947	0.3430 0.3694	0.3652 0.3694	0.3743 Ave		0.3726			0.1000	4.6	20.0		
Isopropyl alcohol	0.0082 0.0050	0.0068 0.0052	0.0060 0.0050	0.0049 0.0050	0.0052 Lin2	0.0160 0.0051				0.0010			0.9990	0.9990
Carbon disulfide	0.8943 0.6234	0.7265 0.5364	0.6777 +++++	0.6841 0.0441	0.6849 0.0419	Ave Ave		0.6896		0.1000	15.8	20.0		
Acetonitrile	0.0507 0.0430	0.0458 0.0441	0.0441 0.0416	0.0421 0.0849	0.0419 0.0842	Ave Ave		0.0442		0.0010	6.8	20.0		
Methyl acetate	0.1007 0.0859	0.0855 0.0895	0.0849 0.0847	0.0842 0.2650	0.0851 0.2565	Ave Lin2		0.0876	*	0.1000	6.3	20.0		
Methylene Chloride	0.4707 0.2560	0.3437 0.2604	0.2967 0.2564	0.2650 0.2564	0.2565 Lin2	0.1048 0.2524				0.0100			0.9990	0.9990
2-Methyl-2-propanol	0.0091 0.0088	0.0083 0.0094	0.0091 0.0094	0.0090 0.0094	0.0090 Ave			0.0090		0.0010	4.1	20.0		
Acrylonitrile	0.0499 0.0419	0.0434 0.0437	0.0402 0.0428	0.0413 0.0428	0.0410 Ave			0.0430		0.0100	7.0	20.0		
trans-1,2-Dichloroethene	0.4202 0.3376	0.3370 0.3457	0.3303 0.3339	0.3294 0.3339	0.3303 Ave			0.3474		0.1000	8.6	20.0		
Methyl tert-butyl ether	0.5814 0.5167	0.5189 0.5370	0.5210 0.5130	0.5018 0.5130	0.5047 Ave			0.5243		0.1000	4.9	20.0		
Hexane	0.4017 0.3531	0.3789 0.3668	0.3536 0.3585	0.3509 0.3488	0.3488 Ave			0.3640		0.1000	5.0	20.0		
1,1-Dichloroethane	0.5317 0.4538	0.4930 0.4560	0.4733 0.4420	0.4555 0.4420	0.4456 Ave			0.4689		0.2000	6.4	20.0		
Vinyl acetate	0.4886 0.4429	0.4195 0.4500	0.4150 0.4191	0.4315 0.4328	0.4328 Ave			0.4374		0.1000	5.5	20.0		
Isopropyl ether	0.7745 0.6821	0.6601 0.6967	0.6747 0.6543	0.6581 0.6129	0.6633 Ave			0.6830		0.1000	5.8	20.0		
2-Chloro-1,3-butadiene	0.4399 0.3906	0.3716 0.3982	0.3852 0.3765	0.3854 0.3863	0.3801 Ave			0.3909		0.1000	5.5	20.0		
Tert-butyl ethyl ether	0.7090 0.6181	0.6074 0.6388	0.6052 0.6129	0.6092 0.6117	0.6117 Ave			0.6290		0.1000	5.4	20.0		
2,2-Dichloropropane	0.5037 0.3973	0.3878 0.4071	0.4007 0.3863	0.3791 0.3858	0.3801 Ave			0.4060		0.1000	10.0	20.0		
cis-1,2-Dichloroethene	0.5500 0.3926	0.4337 0.4008	0.4337 0.3824	0.3971 0.3867	0.3867 0.3819	Ave		0.4157		0.1000	13.7	20.0		
2-Butanone (MEK)	0.0166 0.0144	0.0137 0.0151	0.0137 0.0147	0.0143 0.1314	0.0146 0.1133	Ave		0.0146		0.0100	6.3	20.0		
Ethyl acetate	+++ 0.1097	0.0844 0.1086	0.1314 0.1079	0.1133 0.1079	0.1187 Ave			0.1106		0.0100	12.8	20.0		

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	RRF				CURVE COEFFICIENT		#	MIN RRF	% RSD	#	MAX % RSD	R^2	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 5	B	M1								
Propionitrile	0.0164 0.0152	0.0170 0.0154	0.0159 0.0155	0.0157 0.0149	Ave		0.0158			0.0100	4.3	20.0		
Chlorobromomethane	0.1916 0.1728	0.1780 0.1670	0.1755 0.1516	0.1691 0.1712	Ave		0.1721			0.1000	6.5	20.0		
Chloroform	0.9408 0.4819	0.7015 0.4810	0.5745 0.4501	0.5031 0.0301	Lin2	0.2338	0.4698			0.2000				0.9990
Tetrahydrofuran	0.0416 0.0318	0.0388 0.0319	0.0290 0.0310	0.0301 0.0311	Ave		0.0332	*		0.0500	13.6	20.0		
1,1,1-Trichloroethane	0.5163 0.4423	0.4619 0.4509	0.4428 0.4241	0.4401 0.4346	0.4371 0.4367	Ave		0.4519		0.1000	6.2	20.0		
Cyclohexane	0.4767 0.4414	0.4768 0.4589	0.4515 0.4373	0.4346 0.4373	Ave		0.4568			0.1000	6.2	20.0		
1,1-Dichloropropene	0.4359 0.3759	0.3868 0.3874	0.3798 0.3662	0.3701 0.3662	0.3706 Ave		0.3841			0.1000	5.8	20.0		
Carbon tetrachloride	0.4416 0.4035	0.3831 0.4108	0.3955 0.3828	0.3870 0.3828	0.3899 Ave		0.3993			0.1000	4.9	20.0		
Isobutyl alcohol	0.0046 0.0037	0.0040 0.0039	0.0036 0.0039	0.0035 0.0039	0.0037 Ave		0.0039			0.0010	9.0	20.0		
Benzene	1.3229 1.1138	1.1453 1.1230	1.1237 1.0246	1.1241 1.0068	1.1045 0.0071	Ave	1.1352			0.5000	7.4	20.0		
t-Amyl alcohol	0.0100 0.0075	0.0076 0.0079	0.0083 0.0079	0.0068 0.2956	0.0071 0.2817	Ave	0.0079			0.0010	12.5	20.0		
1,2-Dichloroethane	0.3480 0.2890	0.3171 0.2885	0.2956 0.2744	0.2817 0.2874	0.2874 Ave		0.2977			0.1000	8.0	20.0		
Tert-amyl methyl ether	0.6338 0.5552	0.5498 0.5731	0.5337 0.5487	0.5327 0.5456	0.5456 Ave		0.5591			0.1000	5.9	20.0		
n-Heptane	0.3828 0.3035	0.3122 0.3221	0.3084 0.3145	0.3011 0.3130	0.3017 0.0025	Ave	0.3183			0.1000	8.5	20.0		
n-Butanol	0.0027 0.0026	0.0026 0.0027	0.0025 0.0028	0.0024 0.0028	0.0025 0.0028	Ave	0.0026			0.0010	5.1	20.0		
Trichloroethene	0.3687 0.3260	0.3450 0.3304	0.3305 0.3130	0.3190 0.3215	0.3215 Ave		0.3318			0.2000	5.3	20.0		
Ethyl acrylate	+4++ 0.1565	0.1206 0.1674	0.1207 0.1641	0.1410 0.1641	0.1438 Ave		0.1449			0.1000	13.2	20.0		
Methylcyclohexane	0.5872 0.5016	0.5269 0.5167	0.4935 0.4896	0.4888 0.4946	0.4946 Ave		0.5124			0.1000	6.5	20.0		
1,2-Dichloropropane	0.3167 0.2511	0.2525 0.2541	0.2577 0.2435	0.2469 0.2469	0.2469 Ave		0.2587			0.1000	9.2	20.0		
Methyl methacrylate	0.1223 0.1125	0.1105 0.1163	0.1096 0.1123	0.1086 0.1123	0.1086 Ave		0.1123			0.1000	4.5	20.0		

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	RRF				CURVE TYPE	COEFFICIENT		#	MIN RRF	% RSD	#	MAX % RSD	R^2	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 5		B	M1								
Dibromomethane	0.1450 0.1249	0.1281 0.1280	0.1245 0.1210	0.1276 0.0010	0.1258 Ave		0.1281		0.0500	5.6	20.0	*	0.0010	11.4	20.0
1,4-Dioxane	+++++ 0.0009	0.0012 0.0010	0.0010 +++++	0.0009 Ave											
Dichlorobromomethane	0.3675 0.3421	0.3389 0.3512	0.3180 0.3346	0.3321 0.1300	0.3339 Ave		0.3398		0.2000	4.3	20.0				
2-Chloroethyl vinyl ether	0.1423 0.1304	0.1354 0.1317	0.1254 0.1274	0.1256 Ave			0.1310		0.1000	4.3	20.0				
cis-1,3-Dichloropropene	0.5427 0.5227	0.5065 0.5230	0.4866 0.4920	0.4910 0.5024 Ave			0.5034		0.2000	3.8	20.0				
4-Methyl-2-pentanone (MBK)	0.0586 0.0618	0.0615 0.0625	0.0595 0.0572	0.0608 Ave			0.0604		0.0500	3.0	20.0				
Toluene	1.9950 1.6577	1.8577 1.5833	1.7934 1.3953	1.6573 1.6499 Ave			1.6987		0.4000	10.7	20.0				
trans-1,3-Dichloropropene	0.3976 0.4062	0.3799 0.4112	0.3634 0.3902	0.3779 0.3831 Ave			0.3887		0.0100	4.1	20.0				
Ethyl methacrylate	0.3214 0.2923	0.2790 0.2916	0.2840 0.2748	0.2788 0.2827 Ave			0.2881		0.1000	5.1	20.0				
1,1,2-Trichloroethane	0.2829 0.2403	0.2711 0.2370	0.2542 0.2200	0.2421 0.2405 Ave			0.2485		0.1000	8.1	20.0				
Tetrachloroethene	0.5609 0.4593	0.5371 0.4496	0.4944 0.4133	0.4515 0.4529 Ave			0.4774		0.2000	10.4	20.0				
1,3-Dichloropropane	0.4892 0.4000	0.4080 0.3984	0.4162 0.3819	0.4025 0.3937 Ave			0.4112		0.1000	8.0	20.0				
2-Hexanone	0.0438 0.0510	0.0499 0.0529	0.0483 0.0508	0.0498 Ave			0.0488	*	0.0500	6.8	20.0				
Chlorodibromomethane	0.2038 0.2257	0.1925 0.2342	0.1999 0.2329	0.2027 0.2209 Ave			0.2128		0.1000	7.5	20.0				
n-Butyl acetate	0.1467 0.1486	0.1217 0.1589	0.1266 0.1581	0.1350 0.1406 Ave			0.1420		0.1000	9.6	20.0				
1,2-Dibromoethane	0.2330 0.2264	0.2181 0.2278	0.2195 0.2209	0.2126 0.2228 Ave			0.2226		0.1000	2.9	20.0				
Chlorobenzene	1.1854 1.0591	1.1307 1.0497	1.0991 1.0073	1.0414 1.0367 Ave			1.0762		0.5000	5.4	20.0				
1,1,1,2-Tetrachloroethane	0.3564 0.3792	0.3349 0.3739	0.3430 0.3739	0.3521 0.3611 Ave			0.3600		0.1000	4.6	20.0				
Ethylbenzene	1.7901 1.7705	1.6509 1.7508	1.6207 1.6209	1.6696 1.7244 Ave			1.6997		0.1000	4.0	20.0				
m-Xylene & p-Xylene	1.3231 1.4058	1.2109 1.3932	1.2907 1.3282	1.3297 1.3564 Ave			1.3297		0.1000	4.6	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	RRF				CURVE TYPE	COEFFICIENT		#	MIN RRF	% RSD	#	MAX % RSD	R^2	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 5		B	M1								
o-Xylene	1.2828 1.4319	1.1438 1.4352	1.1996 1.3609	1.3253 1.3609	Ave		1.3210		0.3000	8.0		20.0			
Styrene	0.9166 1.1460	0.8962 1.1720	0.9750 1.0942	1.0931 1.1069	Ave		1.0500		0.3000	10.1		20.0			
Bromoform	0.1401 0.1565	0.1255 0.1686	0.1298 0.1681	0.1337 0.1430	Ave		0.1457		0.0100	11.6		20.0			
Isopropylbenzene	1.5314 1.7959	1.4914 1.7995	1.5321 1.6557	1.6827 1.7615	Ave		1.6563		0.1000	7.6		20.0			
Bromobenzene	1.2104 0.9551	0.9627 0.9745	0.9095 0.9717	0.9178 0.9325	Ave		0.9793		0.1000	9.9		20.0			
1,1,2,2-Tetrachloroethane	0.4778 0.3989	0.4203 0.4050	0.4100 0.3983	0.4092 0.3983	Ave		0.4149		0.3000	6.4		20.0			
1,2,3-Trichloropropane	0.1364 0.1328	0.1240 0.1326	0.1306 0.1278	0.1260 0.1278	Ave		0.1319		0.1303				3.1		20.0
trans-1,4-Dichloro-2-butene	0.0844 0.0975	0.0716 0.1008	0.0735 0.1031	0.0998 0.0989	Ave		0.0869		0.0897	*	0.1000	13.9			20.0
N-Propylbenzene	3.3371 3.5687	3.2579 3.4862	3.1887 3.2399	3.4427 3.5275	Ave		3.3811		0.1000	4.3		20.0			
2-Chlorotoluene	2.2220 2.1039	2.0955 2.0801	2.1113 1.9968	2.0703 2.0905	Ave		2.0963		0.1000	3.0		20.0			
1,3,5-Trimethylbenzene	2.2755 2.6919	2.2327 2.6597	2.3520 2.4738	2.5320 2.6166	Ave		2.4793		0.1000	7.1		20.0			
4-Chlorotoluene	2.4882 2.5021	2.2919 2.4968	2.2897 2.3417	2.4294 2.4501	Ave		2.4112		0.1000	3.7		20.0			
1,2,4-Trimethylbenzene	2.2166 2.7197	2.2307 2.6701	2.5926 2.5207	2.6459 2.5207	Ave		2.4857		0.1000	8.4		20.0			
sec-Butylbenzene	2.9221 3.3669	2.8336 3.3112	2.9397 3.0636	3.1669 3.2521	Ave		3.1070		0.1000	6.4		20.0			
1,3-Dichlorobenzene	1.4735 1.4859	1.3526 1.4749	1.3798 1.4431	1.4277 1.4321	Ave		1.4337		0.6000	3.3		20.0			
4-Isopropyltoluene	2.6562 2.9754	2.4994 2.9527	2.5479 2.7496	2.8171 2.8565	Ave		2.7569		0.1000	6.4		20.0			
1,4-Dichlorobenzene	1.7350 1.5255	1.6691 1.5088	1.5764 1.4480	1.4920 1.4640	Ave		1.5524		0.5000	6.6		20.0			
1,2-Dichlorobenzene	1.3538 1.3392	1.2805 1.3244	1.2850 1.2542	1.2919 1.2542	Ave		1.3029		0.4000	2.6		20.0			
n-Butylbenzene	1.9986 2.4639	1.8025 2.4652	1.8969 2.3335	2.2023 2.3186	Ave		2.1852		0.1000	11.7		20.0			
1,2-Dibromo-3-Chloropropane	0.0607 0.0818	0.0692 0.0868	0.0768 0.0874	0.0740 0.0874	Ave		0.0754		0.0100	12.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

## FORM VI

GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Heated Purge: (Y/N) N

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	RRF				CURVE TYPE	COEFFICIENT		#	MIN RRF	% RSD	#	MAX % RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 5		B	M1								
1,3,5-Trichlorobenzene	0.9021 1.0344	0.8993 1.0459	0.8404 1.0444	0.9090 1.0444	Ave		0.9551			0.1000	8.3		20.0		
1,2,4-Trichlorobenzene	0.6801 0.8042	0.6856 0.8021	0.6227 0.8201	0.6981 0.8201	Ave		0.7530			0.2000	9.8		20.0		
Hexachlorobutadiene	0.4312 0.3985	0.3650 0.4067	0.3647 0.4222	0.3664 0.4222	Ave		0.3767			0.1000	6.9		20.0		
Naphthalene	+++++	0.7061	0.7949	1.0287	1.1833	Lin2	-0.602	1.2291		0.0100					
1,2,3-Trichlorobenzene	0.5200 0.6304	0.4795 0.6503	0.5328 0.6250	0.5645 0.6250	Ave		0.6057			0.1000	10.6		20.0		
Dibromofluoromethane (Surr)	0.2429 0.2384	0.2416 0.2387	0.2427 0.2349	0.2428 0.2349	Ave		0.2433			0.5760					
1,2-Dichloroethane-d4 (Surr)	0.2169 0.2103	0.2164 0.2068	0.2174 0.2014	0.2153 0.2014	Ave		0.2123			0.2407					
Toluene-d8 (Surr)	1.2635 1.2231	1.2853 1.1966	1.3005 1.1601	1.2638 1.1601	Ave		1.2485			0.2121					
4-Bromofluorobenzene (Surr)	0.7343 0.7293	0.7452 0.7297	0.7415 0.7327	0.7473 0.7327	Ave		0.7545			1.2427					
							0.7393								

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

**FORM VI**  
**GC/MS VOA INITIAL CALIBRATION DATA**  
**INTERNAL STANDARD RESPONSE AND CONCENTRATION**

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Heated Purge: (Y/N) N

Calibration ID: 42270

Analy Batch No.: 249241

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0005 490-249241/2	051815-18.D
Level 2	STD001 490-249241/3	051815-19.D
Level 3	STD002 490-249241/4	051815-20.D
Level 4	STD010 490-249241/5	051815-21.D
Level 5	STD020 490-249241/6	051815-22.D
Level 6	ICIS 490-249241/7	051815-23.D
Level 7	STD100 490-249241/8	051815-24.D
Level 8	STD200 490-249241/9	051815-25.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE				CONCENTRATION (UG/L)					
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	2285	5401	9889	50663	99842	0.500	1.00	2.00	10.0	20.0
Chloromethane	FB	Lin2	253268	519376	1037459			50.0	100	200		
Vinyl chloride	FB	Ave	217720	52991	51822	43394	84801	0.500	1.00	2.00	10.0	20.0
Butadiene	FB	Ave	242829	4936	437890	942284		50.0	100	200		
Bromomethane	FB	Ave	2443	506137	4936	9529	47414	0.500	1.00	2.00	10.0	20.0
Chloroethane	FB	Ave	225390	4257	471209	8402	41927	0.500	1.00	2.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	2083	3757	6677	32702	65965	0.500	1.00	2.00	10.0	20.0
Trichlorofluoromethane	FB	Lin2	176830	363089	+++++			50.0	100	200		
Ethanol	FB	Lin2	162112	4060	42405	6519	30339	0.500	1.00	2.00	10.0	20.0
Ethyl ether	FB	Ave	4142	7672	14235	78915	157788	0.500	1.00	2.00	10.0	20.0
Acrolein	FB	Ave	406617	848329	1743237			50.0	100	200		
Freon-113	FB	Ave	4863	8061	16317	79468	158151	0.500	1.00	2.00	10.0	20.0
1,1-Dichloroethene	FB	Lin2	413319	860891	1668751			50.0	100	200		
Acetone	FB	Lin2	305	470	740	3054	6614	20.0	40.0	80.0	400	800
Iodomethane	FB	Ave	17417	32004	+++++			2000	4000	8000		

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	IS REF	CURVE TYPE	RESPONSE						CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Isopropyl alcohol	FB	Lin2	704 45526	1155 96471	2069 196070	8495	18493	5.00 500	10.0 1000	20.0 2000	100	200	
Carbon disulfide	FB	Ave	7710 564315	12311 997260	23356 +++++	118204	241511	0.500 50.0	1.00 100	2.00 ++++)	10.0	20.0	
Acetonitrile	FB	Ave	4371 389127	7767 820327	15189 1625111	72720	147710	5.00 500	10.0 1000	20.0 2000	100	200	
Methyl acetate	FB	Ave	4340 388836	7245 832276	14621 1652726	72786	149996	2.50 250	5.00 500	10.0 1000	50.0	100	
Methylene Chloride	FB	Lin2	4058 231771	5824 484144	10226 1000516	45793	90433	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
2-Methyl-2-propanol	FB	Ave	783 79566	1398 174695	3121 368168	15617	31828	5.00 500	10.0 1000	20.0 2000	100	200	
Acrylonitrile	FB	Ave	4305 379540	7348 812451	13859 1669561	71403	144684	5.00 500	10.0 1000	20.0 2000	100	200	
trans-1,2-Dichloroethene	FB	Ave	3623 305634	5710 642793	11899 1302945	57072	116136	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
Methyl tert-butyl ether	FB	Ave	5012 467803	8793 998387	2001902 2001902	86715	177958	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
Hexane	FB	Ave	3463 319648	6421 681882	12185 1398890	60636	122998	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
1,1-Dichloroethane	FB	Ave	4584 410834	8353 847776	16310 1725118	78705	157132	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
Vinyl acetate	FB	Ave	8424 801924	14216 1673421	28606 3271229	149113	305224	1.00 100	2.00 200	4.00 400	20.0	40.0	
Isopropyl ether	FB	Ave	6677 617509	11185 1295314	23252 2553663	113716	233873	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
2-Chloro-1,3-butadiene	FB	Ave	3792 353631	6296 740260	13273 1469444	66590	134027	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
Tert-butyl ethyl ether	FB	Ave	6112 559604	10632 1187686	20856 2391843	105269	215696	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
2,2-Dichloropropane	FB	Ave	4342 359632	6571 756808	13810 1507587	65508	136036	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
cis-1,2-Dichloroethene	FB	Ave	4742 355393	7349 745100	13683 1492501	66826	134658	0.500 50.0	1.00 100	2.00 200	10.0	20.0	
2-Butanone (MEK)	FB	Ave	716 65006	1159 139987	2361 287803	12388	25810	2.50 250	5.00 500	10.0 1000	50.0	100	
Ethyl acetate	FB	Ave	4744 198590	7349 403695	13683 842146	9057	39144	0.500 100	1.00 200	4.00 400	20.0	40.0	
Propionitrile	FB	Ave	1411 137170	2889 286395	5479 605970	27100	52711	5.00 500	10.0 1000	20.0	100	200	
Chlorobromomethane	FB	Ave	1652 156461	3017 310461	6047 591810	29214	60356	0.500 50.0	1.00 100	2.00 200	10.0	20.0	

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	IS REF	CURVE TYPE	RESPONSE				CONCENTRATION (UG/L)			
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3
Chloroform	FB	Lin2	8111 436251	11887 894293	19797 1756751	86937	171756	0.500 50.0	1.00 100	2.00 200
Tetrahydrofuran	FB	Ave	718 57612	1315 118765	1996 241829	10410	21944	1.00 100	2.00 200	4.00 400
1,1,1-Trichloroethane	FB	Ave	4451 400439	7826 838346	15262 1655120	76043	154135	0.500 50.0	1.00 100	2.00 200
Cyclohexane	FB	Ave	4463 399597	8079 853103	15559 1706437	75096	153972	0.500 50.0	1.00 100	2.00 200
1,1-Dichloropropene	FB	Ave	3758 340286	6554 720176	13087 1428953	63958	130682	0.500 50.0	1.00 100	2.00 200
Carbon tetrachloride	FB	Ave	3807 365321	6491 763834	13629 1493752	66872	137474	0.500 50.0	1.00 100	2.00 200
Isobutyl alcohol	FB	Ave	995 83104	1708 179291	3109 383634	15130	32989	12.5 1250	25.0 2500	50.0 5000
Benzene	FB	Ave	11405 1008287	19407 2087901	38724 3998742	194236	389460	0.500 50.0	1.00 100	2.00 200
t-Amyl alcohol	FB	Ave	865 67816	1282 146878	2859 309831	11821	24969	5.00 50.0	10.0 100	20.0 200
1,2-Dichloroethane	FB	Ave	3000 261665	5373 536290	10185 1070744	48677	101325	0.500 50.0	1.00 100	2.00 200
Tert-amyl methyl ether	FB	Ave	5464 502574	9317 1065589	18393 2141272	92051	192388	0.500 50.0	1.00 100	2.00 200
n-Heptane	FB	Ave	3300 274761	5290 598873	10627 1227184	52022	106390	0.500 50.0	1.00 100	2.00 200
n-Butanol	FB	Ave	592 58191	1115 126448	2184 270462	10420	21706	12.5 1250	25.0 2500	50.0 5000
Trichloroethylene	FB	Ave	3179 295106	5846 614201	11389 1221569	55124	113355	0.500 50.0	1.00 100	2.00 200
Ethyl acrylate	FB	Ave	+444+ 141672	2043 311282	4161 640395	24361	50698	+++++ 50.0	1.00 100	2.00 200
Methylcyclohexane	FB	Ave	5062 454116	8929 960666	17006 1910734	84470	174385	0.500 50.0	1.00 100	2.00 200
1,2-Dichloropropane	FB	Ave	2730 227301	4279 472411	8881 950205	42666	87041	0.500 50.0	1.00 100	2.00 200
Methyl methacrylate	FB	Ave	2108 203711	3746 432288	7327 876463	37889	76573	1.00 100	2.00 200	4.00 400
Dibromomethane	FB	Ave	1250 113052	2171 237905	4289 472336	22054	44361	0.500 50.0	1.00 100	2.00 200
1,4-Dioxane	FB	Ave	+444+ 16420	401 35873	718 +++++	3392	6092	+++++ 20.0	20.0 200	400 4000
Dichlorobromomethane	FB	Ave	3168 309703	5742 652967	10960 1305999	57395	117718	0.500 50.0	1.00 100	2.00 200

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	IS REF	CURVE TYPE	RESPONSE						CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
2-Chloroethyl vinyl ether	CBZ	Ave	916 88477	1680 189084	3243 391036	16242	33256	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
cis-1,3-Dichloropropene	CBZ	Ave	3493 354719	6286 750977	12140 1510713	63588	133046	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
4-Methyl-2-pentanone (MTBK)	CBZ	Ave	1887 209778	3819 448415	7604 877480	38512	80482	2.50 250	5.00 500	10.0 1000	50.0 1000	100 200	
Toluene	CBZ	Ave	12841 1124984	23055 2273385	44741 4284392	214649	436904	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
trans-1,3-Dichloropropene	CBZ	Ave	25559 275703	4715 590381	9067 1198029	48947	101448	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Ethyl methacrylate	CBZ	Ave	2069 198355	3462 418713	7086 843829	36104	74860	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
1,1,2-Trichloroethane	CBZ	Ave	1821 163080	3365 340280	6341 675651	31361	63692	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Tetrachloroethene	CBZ	Ave	3610 311694	6666 645563	12334 1269176	58476	119939	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
1,3-Dichloropropane	CBZ	Ave	3149 271429	5063 572076	10383 1172583	52129	104257	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
2-Hexanone	CBZ	Ave	1409 173149	2719 379452	6219 779375	31280	65888	2.50 250	5.00 500	10.0 1000	50.0 1000	100 200	
Chlorodibromomethane	CBZ	Ave	1312 153201	2389 336219	4986 715029	26247	55861	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
n-Butyl acetate	FB	Ave	1265 134497	2062 295404	4364 617027	23321	49558	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
1,2-Dibromoethane	CBZ	Ave	1500 153674	2707 327057	5476 678284	27532	59001	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Chlorobenzene	CBZ	Ave	7630 718756	14033 1507287	27420 3092824	134876	274535	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
1,1,1,2-Tetrachloroethane	CBZ	Ave	2294 257340	4156 545480	8556 1147970	45598	95620	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Ethylbenzene	CBZ	Ave	11522 1201549	20489 2513975	40433 4976982	216241	456620	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
m-Xylene & p-Xylene	CBZ	Ave	8516 954023	15028 2000409	32200 4078405	172212	359184	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
o-Xylene	CBZ	Ave	8257 971781	14195 2060796	29928 4178854	171643	367606	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Styrene	CBZ	Ave	8500 777759	11122 1682822	32324 3359668	141571	293111	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Bromoform	CBZ	Ave	902 106231	1558 242044	3237 516098	17320	37859	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	
Isopropylbenzene	CBZ	Ave	9857 1218778	18509 2583842	38221 5084035	217930	466457	0.500 50.0	1.00 100	2.00 200	10.0 200	20.0 200	

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

Calibration Start Date: 05/18/2015 17:36

GC Column: DB-624

Calibration End Date: 05/18/2015 20:46

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Heated Purge: (Y/N) N

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	IS REF	CURVE TYPE	RESPONSE						CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Bromobenzene	DCB	Ave	4188 372230	6597 819711	12744 1713564	67388	141500	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,1,2,2-Tetrachloroethane	DCB	Ave	1653 155472	2880 340641	5745 702416	30042	60726	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,2,3-Trichloropropane	DCB	Ave	472 51742	850 111527	1830 225332	9251	20014	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
trans-1,4-Dichloro-2-butene	DCB	Ave	292 38001	491 84820	1030 181746	7328	13190	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
N-Propylbenzene	DCB	Ave	11546 1390910	223226 2932429	44681 5713589	252768	535297	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
2-Chlorotoluene	DCB	Ave	7688 819987	14360 1749639	29584 3521368	152003	317230	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,3,5-Trimethylbenzene	DCB	Ave	7873 1049159	15300 2237216	32957 4362464	185908	397070	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
4-Chlorotoluene	DCB	Ave	8609 975182	15706 2100200	32084 4129584	178370	371802	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,2,4-Trimethylbenzene	DCB	Ave	7669 1059982	15206 2245990	32238 4445231	193555	401521	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
sec-Butylbenzene	DCB	Ave	1312227 10110	19418 2785210	41191 5402639	232519	493500	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,3-Dichlorobenzene	DCB	Ave	5098 579126	9269 1240645	19334 2544940	104827	217316	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
4-Isopropyltoluene	DCB	Ave	9190 1159673	17128 2483708	35702 4848884	206837	433480	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,4-Dichlorobenzene	DCB	Ave	6003 594549	11438 1269170	22089 2553523	109548	2222155	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,2-Dichlorobenzene	DCB	Ave	4684 521955	8775 1114017	18006 2211756	94856	196351	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
n-Butylbenzene	DCB	Ave	6915 960314	12352 2073586	26580 4115124	161699	351848	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,2-Dibromo-3-Chloropropane	DCB	Ave	210 31876	473 72980	941 154048	5638	11227	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,3,5-Trichlorobenzene	DCB	Ave	3121 403138	6163 879732	11776 1841714	66739	146554	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
1,2,4-Trichlorobenzene	DCB	Ave	2353 313437	4698 674714	8725 1446301	51255	114270	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
Hexachlorobutadiene	DCB	Ave	1492 155299	2501 342129	5110 744614	26903	57160	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	
Naphthalene	DCB	Lin2	+++++	4839 493429	11138 1107930	75526 2280260	179561	+++++	1.00 50.0	2.00 100	10.0 200	20.0 200	
1,2,3-Trichlorobenzene	DCB	Ave	1799 245704	3286 547033	7465 1102157	41448	91911	0.500 50.0	1.00 100	2.00 200	10.0 100	20.0 200	

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/18/2015 17:36

Calibration End Date: 05/18/2015 20:46

Calibration ID: 42270

Analy Batch No.: 249241

ANALYTE	IS REF	CURVE TYPE	RESPONSE				CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4
Dibromofluoromethane (Surrogate)	FB	Ave	104718 107910	102328 110961	104553 114586	104880	107243	25.0 25.0	25.0 25.0	25.0 25.0	25.0 25.0
1,2-Dichloroethane-d4 (Surrogate)	FB	Ave	93500 95182	91653 96107	93638 98259	92998	93579	25.0 25.0	25.0 25.0	25.0 25.0	25.0 25.0
Toluene-d8 (Surrogate)	CBZ	Ave	406637 415029	398781 429528	405556 445249	409199	413256	25.0 25.0	25.0 25.0	25.0 25.0	25.0 25.0
4-Bromofluorobenzene (Surrogate)	DCB	Ave	127025 142122	127662 153454	129876 161503	137169	143112	25.0 25.0	25.0 25.0	25.0 25.0	25.0 25.0

Curve Type Legend:

Ave = Average ISTD

Lin2 = Linear 1/conc^2 ISTD

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-18.D  
Lims ID: std0005  
Client ID:  
Sample Type: IC Calib Level: 1  
Inject. Date: 18-May-2015 17:36:30 ALS Bottle#: 18 Worklist Smp#: 2  
Purge Vol: 10.000 mL Dil. Factor: 1.0000  
Sample Info: STD0005  
Misc. Info.: 490-0055131-002  
Operator ID: EML Instrument ID: HP32  
Sublist: chrom-8260HP32\*sub14  
Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
Limit Group: MSV 8260C ICAL  
Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
Last Update: 19-May-2015 11:39:05 Calib Date: 18-May-2015 20:46:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D  
Column 1 : Det: MS SCAN  
Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:19:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	431053	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.715	-0.001	84	321828	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	97	172994	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.031	3.031	0.000	94	104718	25.0	25.2	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.243	0.000	0	93500	25.0	25.6	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	93	406637	25.0	25.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.749	0.000	96	127025	25.0	24.8	
9 Dichlorodifluoromethane	85	1.066	1.068	-0.002	99	2285	0.5000	0.4666	
10 Chloromethane	50	1.180	1.171	0.009	98	2991	0.5000	0.4832	
11 Vinyl chloride	62	1.224	1.215	0.009	97	2852	0.5000	0.5880	
12 Butadiene	54	1.240	1.237	0.003	88	2443	0.5000	0.5657	
13 Bromomethane	96	1.387	1.384	0.003	88	2083	0.5000	0.5938	
14 Chloroethane	64	1.436	1.433	0.003	98	2405	0.5000	0.4962	
15 Dichlorofluoromethane	67	1.523	1.525	-0.002	95	4142	0.5000	0.5334	
16 Trichlorofluoromethane	101	1.561	1.558	0.003	95	4863	0.5000	0.5987	
17 Ethanol	45	1.648	1.656	-0.008	15	305	20.0	19.7	
18 Ethyl ether	59	1.697	1.694	0.003	87	1590	0.5000	0.5829	
19 Acrolein	56	1.779	1.770	0.009	30	625	1.25	1.97	
20 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.808	-0.002	86	2723	0.5000	0.5547	
21 1,1-Dichloroethene	96	1.817	1.814	0.003	97	2561	0.5000	0.5674	
22 Acetone	58	1.855	1.846	0.009	99	567	2.50	2.43	
23 Iodomethane	142	1.909	1.901	0.008	99	3282	0.5000	0.5109	
24 Isopropyl alcohol	45	1.915	1.912	0.003	39	704	5.00	4.90	
25 Carbon disulfide	76	1.937	1.933	0.004	99	7710	0.5000	0.6484	
26 Acetonitrile	41	1.997	1.993	0.004	75	4371	5.00	5.74	
27 3-Chloro-1-propene	76	1.997	1.993	0.004	91	1535	NC	NC	
28 Methyl acetate	43	2.007	2.004	0.003	96	4340	2.50	2.87	
30 Methylene Chloride	84	2.062	2.059	0.003	82	4058	0.5000	0.5171	
31 2-Methyl-2-propanol	59	2.116	2.119	-0.003	69	783	5.00	5.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.198	2.189	0.009	79	4305	5.00	5.80	
34 trans-1,2-Dichloroethene	61	2.203	2.200	0.003	83	3623	0.5000	0.6048	
33 Methyl tert-butyl ether	73	2.203	2.200	0.003	93	5012	0.5000	0.5544	
35 Hexane	57	2.340	2.336	0.004	91	3463	0.5000	0.5517	
36 1,1-Dichloroethane	63	2.427	2.423	0.004	94	4584	0.5000	0.5670	
37 Vinyl acetate	43	2.459	2.451	0.008	96	8424	1.00	1.12	
38 Isopropyl ether	45	2.454	2.456	-0.002	74	6677	0.5000	0.5670	
39 2-Chloro-1,3-butadiene	53	2.481	2.472	0.009	91	3792	0.5000	0.5626	
40 Tert-butyl ethyl ether	59	2.661	2.657	0.004	97	6112	0.5000	0.5635	
42 cis-1,2-Dichloroethene	61	2.753	2.750	0.003	70	4742	0.5000	0.6617	
41 2,2-Dichloropropane	77	2.753	2.750	0.003	75	4342	0.5000	0.6203	
43 2-Butanone (MEK)	72	2.780	2.766	0.014	85	716	2.50	2.84	
45 Propionitrile	54	2.808	2.804	0.004	96	1411	5.00	5.19	
46 Methacrylonitrile	41	2.895	2.886	0.009	88	7610	5.00	6.19	
47 Chlorobromomethane	130	2.895	2.892	0.003	60	1652	0.5000	0.5567	
48 Tetrahydrofuran	42	2.938	2.930	0.008	35	718	1.00	1.26	
49 Chloroform	83	2.933	2.930	0.003	91	8111	0.5000	0.5036	
50 1,1,1-Trichloroethane	97	3.042	3.044	-0.002	97	4451	0.5000	0.5712	
51 Cyclohexane	56	3.080	3.077	0.003	84	4463	0.5000	0.5666	
53 1,1-Dichloropropene	75	3.151	3.142	0.009	94	3758	0.5000	0.5675	
54 Carbon tetrachloride	117	3.151	3.147	0.004	94	3807	0.5000	0.5530	
55 Isobutyl alcohol	43	3.227	3.224	0.003	23	995	12.5	14.9	
56 Benzene	78	3.281	3.278	0.003	93	11405	0.5000	0.5827	
57 t-Amyl alcohol	59	3.281	3.283	-0.002	37	865	5.00	6.36	
58 1,2-Dichloroethane	62	3.292	3.289	0.003	48	3000	0.5000	0.5845	
59 Tert-amyl methyl ether	73	3.341	3.343	-0.002	95	5464	0.5000	0.5668	
60 n-Heptane	43	3.428	3.425	0.003	78	3300	0.5000	0.6013	
61 n-Butanol	56	3.679	3.665	0.015	48	592	12.5	13.2	
62 Trichloroethene	130	3.695	3.692	0.003	96	3179	0.5000	0.5557	
64 Methylcyclohexane	83	3.820	3.817	0.003	86	5062	0.5000	0.5730	
65 1,2-Dichloropropane	63	3.847	3.844	0.003	91	2730	0.5000	0.6121	
66 Methyl methacrylate	41	3.934	3.920	0.014	81	2108	1.00	1.09	
67 Dibromomethane	93	3.929	3.926	0.003	88	1250	0.5000	0.5659	
68 1,4-Dioxane	88	3.956	3.958	-0.002	26	330	10.0	19.3	
70 Dichlorobromomethane	83	4.038	4.029	0.009	98	3168	0.5000	0.5407	
71 2-Nitropropane	43	4.207	4.198	0.009	58	801	1.00	1.40	
72 2-Chloroethyl vinyl ether	63	4.266	4.247	0.019	85	916	0.5000	0.5431	
73 cis-1,3-Dichloropropene	75	4.364	4.356	0.008	95	3493	0.5000	0.5338	
74 4-Methyl-2-pentanone (MIBK)	58	4.484	4.476	0.008	95	1887	2.50	2.43	
75 Toluene	91	4.609	4.606	0.003	98	12841	0.5000	0.5872	
76 trans-1,3-Dichloropropene	75	4.789	4.775	0.014	91	2559	0.5000	0.5114	
77 Ethyl methacrylate	69	4.865	4.851	0.014	83	2069	0.5000	0.5579	
78 1,1,2-Trichloroethane	97	4.925	4.917	0.009	89	1821	0.5000	0.5692	
79 Tetrachloroethene	166	5.034	5.025	0.009	95	3610	0.5000	0.5874	
80 1,3-Dichloropropane	76	5.061	5.053	0.008	87	3149	0.5000	0.5948	
81 2-Hexanone	58	5.148	5.129	0.019	96	1409	2.50	2.24	
82 Chlorodibromomethane	127	5.235	5.232	0.003	87	1312	0.5000	0.4789	
83 n-Butyl acetate	43	5.252	5.238	0.014	74	1265	0.5000	0.5166	
84 Ethylene Dibromide	107	5.339	5.330	0.009	64	1500	0.5000	0.5234	
85 1-Chlorohexane	91	5.720	5.717	0.003	33	3822	0.5000	0.5608	
86 Chlorobenzene	112	5.742	5.738	0.004	94	7630	0.5000	0.5507	
87 1,1,1,2-Tetrachloroethane	131	5.807	5.804	0.003	87	2294	0.5000	0.4949	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 Ethylbenzene	91	5.840	5.831	0.009	99	11522	0.5000	0.5266	
89 m-Xylene & p-Xylene	91	5.943	5.934	0.009	0	8516	0.5000	0.4975	
90 o-Xylene	91	6.291	6.277	0.014	95	8257	0.5000	0.4856	
91 Styrene	104	6.319	6.294	0.025	94	5900	0.5000	0.4365	
92 Bromoform	173	6.466	6.457	0.009	47	902	0.5000	0.4810	
93 Isopropylbenzene	105	6.613	6.609	0.004	95	9857	0.5000	0.4623	
94 Cyclohexanone	55	6.716	6.702	0.014	25	266	5.00	4.67	
95 Bromobenzene	77	6.890	6.876	0.014	84	4188	0.5000	0.6180	
96 1,1,2,2-Tetrachloroethane	83	6.901	6.892	0.009	72	1653	0.5000	0.5757	
97 1,2,3-Trichloropropane	110	6.939	6.925	0.014	14	472	0.5000	0.5237	
98 trans-1,4-Dichloro-2-butene	53	6.972	6.947	0.025	1	292	0.5000	0.4704	
99 N-Propylbenzene	91	6.999	6.985	0.014	98	11546	0.5000	0.4935	
100 2-Chlorotoluene	91	7.075	7.061	0.014	98	7688	0.5000	0.5300	
101 1,3,5-Trimethylbenzene	105	7.162	7.159	0.003	90	7873	0.5000	0.4589	
102 4-Chlorotoluene	91	7.179	7.159	0.020	98	8609	0.5000	0.5160	
103 tert-Butylbenzene	119	7.462	7.453	0.009	92	7355	0.5000	0.4956	
104 1,2,4-Trimethylbenzene	105	7.516	7.502	0.014	96	7669	0.5000	0.4459	
106 sec-Butylbenzene	105	7.669	7.660	0.009	94	10110	0.5000	0.4702	
107 1,3-Dichlorobenzene	146	7.778	7.758	0.020	97	5098	0.5000	0.5139	
108 4-Isopropyltoluene	119	7.810	7.807	0.003	95	9190	0.5000	0.4817	
109 1,4-Dichlorobenzene	146	7.848	7.845	0.003	92	6003	0.5000	0.5588	
110 1,2,3-Trimethylbenzene	105	7.908	7.900	0.008	97	8629	0.5000	0.4960	
111 Benzyl chloride	91	8.006	7.981	0.025	97	1601	0.5000	0.7268	
112 1,2-Dichlorobenzene	146	8.208	8.193	0.015	78	4684	0.5000	0.5195	
113 n-Butylbenzene	91	8.208	8.193	0.015	95	6915	0.5000	0.4573	
114 1,2-Dibromo-3-Chloropropan	157	8.953	8.950	0.003	1	210	0.5000	0.4023	
115 1,3,5-Trichlorobenzene	180	9.171	9.152	0.019	92	3121	0.5000	0.4722	
116 1,2,4-Trichlorobenzene	180	9.802	9.778	0.024	94	2353	0.5000	0.4638	
117 Hexachlorobutadiene	225	9.982	9.979	0.003	93	1492	0.5000	0.5508	
118 Naphthalene	128	10.096	10.055	0.041	12	2702	0.5000	0.8076	
119 1,2,3-Trichlorobenzene	180	10.369	10.349	0.020	94	1799	0.5000	0.4513	
S 135 Xylenes, Total	1				0			0.9831	
S 136 1,3-Dichloropropene, Total	1				0			1.05	
S 132 1,2-Dichloroethene, Total	1				0			1.27	
S 133 Trihalomethanes, Total	1				0			2.00	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

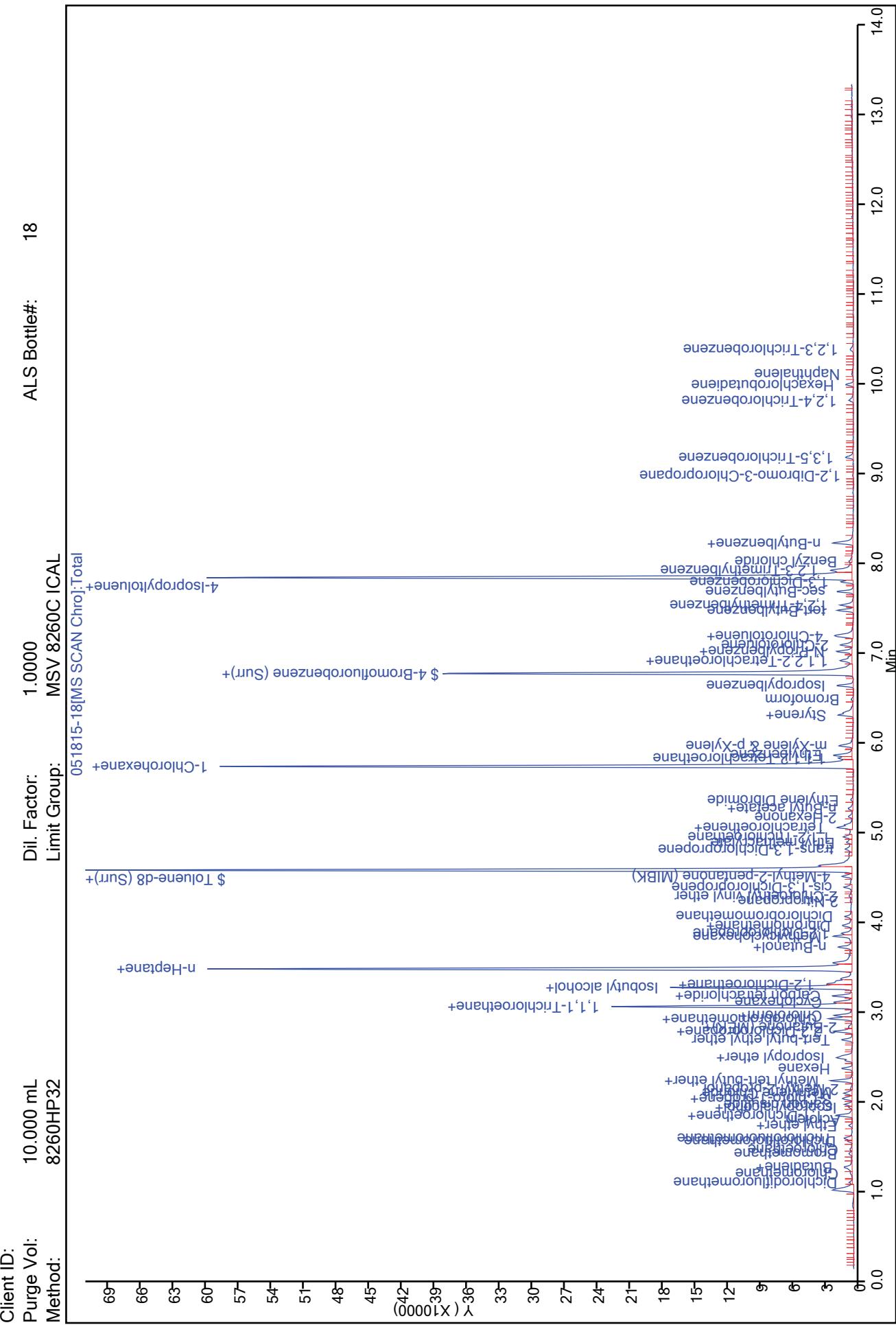
**Reagents:**

V1_gases_I_00104	Amount Added: 0.50	Units: uL	
V1_Mega_I_00036	Amount Added: 0.50	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:07

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\Nvichrom\ChromData\HP32\20150518-55131.b\051815-18.D  
18-May-2015 17:36:30  
Instrument ID: HP32  
std0005



TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-19.D  
 Lims ID: std001  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 18-May-2015 18:03:30 ALS Bottle#: 19 Worklist Smp#: 3  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: STD001  
 Misc. Info.: 490-0055131-003  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:08 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:20:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.450	0.002	99	423621	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.717	5.715	0.002	84	310263	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.821	0.003	94	171320	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.031	-0.003	94	102328	25.0	25.1	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.243	-0.003	0	91653	25.0	25.5	
\$ 6 Toluene-d8 (Surr)	98	4.557	4.555	0.002	93	398781	25.0	25.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.749	0.002	95	127662	25.0	25.2	
9 Dichlorodifluoromethane	85	1.063	1.068	-0.005	97	5401	1.00	1.12	
10 Chloromethane	50	1.177	1.171	0.006	98	5182	1.00	1.03	
11 Vinyl chloride	62	1.221	1.215	0.006	97	4936	1.00	1.04	
12 Butadiene	54	1.237	1.237	0.000	89	4257	1.00	1.00	
13 Bromomethane	96	1.384	1.384	0.000	87	3757	1.00	1.09	
14 Chloroethane	64	1.433	1.433	0.000	97	4060	1.00	1.06	
15 Dichlorofluoromethane	67	1.525	1.525	0.000	97	7672	1.00	1.01	
16 Trichlorofluoromethane	101	1.558	1.558	0.000	97	8061	1.00	1.01	
17 Ethanol	45	1.667	1.656	0.011	1	470	40.0	42.3	M
18 Ethyl ether	59	1.700	1.694	0.006	87	2590	1.00	0.9661	
19 Acrolein	56	1.765	1.770	-0.005	85	858	2.50	2.76	
20 1,1,2-Trichloro-1,2,2-trif	101	1.809	1.808	0.001	92	5051	1.00	1.05	
21 1,1-Dichloroethene	96	1.819	1.814	0.005	97	4689	1.00	1.06	
22 Acetone	58	1.852	1.846	0.006	100	980	5.00	5.12	
23 Iodomethane	142	1.901	1.901	0.000	96	6111	1.00	0.9679	
24 Isopropyl alcohol	45	1.907	1.912	-0.005	25	1155	10.0	10.3	
25 Carbon disulfide	76	1.939	1.933	0.006	99	12311	1.00	1.05	
26 Acetonitrile	41	1.994	1.993	0.001	72	7767	10.0	10.4	
27 3-Chloro-1-propene	76	1.994	1.993	0.001	89	2856	NC	NC	
28 Methyl acetate	43	2.010	2.004	0.006	97	7245	5.00	4.88	
30 Methylene Chloride	84	2.064	2.059	0.005	88	5824	1.00	0.9464	
31 2-Methyl-2-propanol	59	2.113	2.119	-0.006	82	1398	10.0	9.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.195	2.189	0.006	90	7348	10.0	10.1	
34 trans-1,2-Dichloroethene	61	2.206	2.200	0.006	82	5710	1.00	0.9699	
33 Methyl tert-butyl ether	73	2.200	2.200	0.000	94	8793	1.00	0.9897	
35 Hexane	57	2.337	2.336	0.001	91	6421	1.00	1.04	
36 1,1-Dichloroethane	63	2.429	2.423	0.006	97	8353	1.00	1.05	
37 Vinyl acetate	43	2.456	2.451	0.005	96	14216	2.00	1.92	
38 Isopropyl ether	45	2.456	2.456	0.000	70	11185	1.00	0.9665	
39 2-Chloro-1,3-butadiene	53	2.478	2.472	0.006	92	6296	1.00	0.9505	
40 Tert-butyl ethyl ether	59	2.658	2.657	0.001	96	10632	1.00	1.00	
42 cis-1,2-Dichloroethene	61	2.750	2.750	0.000	70	7349	1.00	1.04	
41 2,2-Dichloropropane	77	2.750	2.750	0.000	75	6571	1.00	0.9552	
43 2-Butanone (MEK)	72	2.777	2.766	0.011	94	1159	5.00	4.67	
44 Ethyl acetate	43	2.794	2.788	0.006	98	2860	2.00	1.53	
45 Propionitrile	54	2.816	2.804	0.012	97	2889	10.0	10.8	
46 Methacrylonitrile	41	2.892	2.886	0.006	88	11450	10.0	9.48	
47 Chlorobromomethane	130	2.892	2.892	0.000	57	3017	1.00	1.03	
48 Tetrahydrofuran	42	2.935	2.930	0.005	38	1315	2.00	2.34	
49 Chloroform	83	2.930	2.930	0.000	93	11887	1.00	1.00	
50 1,1,1-Trichloroethane	97	3.050	3.044	0.006	97	7826	1.00	1.02	
51 Cyclohexane	56	3.082	3.077	0.005	87	8079	1.00	1.04	
53 1,1-Dichloropropene	75	3.148	3.142	0.006	92	6554	1.00	1.01	
54 Carbon tetrachloride	117	3.148	3.147	0.001	94	6491	1.00	0.9594	
55 Isobutyl alcohol	43	3.224	3.224	0.000	29	1708	25.0	26.0	
56 Benzene	78	3.284	3.278	0.006	92	19407	1.00	1.01	
57 t-Amyl alcohol	59	3.289	3.283	0.006	42	1282	10.0	9.58	
58 1,2-Dichloroethane	62	3.295	3.289	0.006	97	5373	1.00	1.07	
59 Tert-amyl methyl ether	73	3.344	3.343	0.001	97	9317	1.00	0.9835	
60 n-Heptane	43	3.431	3.425	0.006	87	5290	1.00	0.9809	
61 n-Butanol	56	3.681	3.665	0.017	26	1115	25.0	25.2	
62 Trichloroethene	130	3.697	3.692	0.005	94	5846	1.00	1.04	
63 Ethyl acrylate	55	3.779	3.762	0.017	81	2043	1.00	0.8322	
64 Methylcyclohexane	83	3.817	3.817	0.000	87	8929	1.00	1.03	
65 1,2-Dichloropropane	63	3.850	3.844	0.006	90	4279	1.00	0.9763	
66 Methyl methacrylate	41	3.937	3.920	0.017	90	3746	2.00	1.97	
67 Dibromomethane	93	3.931	3.926	0.005	80	2171	1.00	1.00	
68 1,4-Dioxane	88	3.964	3.958	0.006	23	401	20.0	23.9	
70 Dichlorobromomethane	83	4.035	4.029	0.006	98	5742	1.00	1.00	
71 2-Nitropropane	43	4.204	4.198	0.006	96	1190	2.00	2.12	
72 2-Chloroethyl vinyl ether	63	4.264	4.247	0.017	86	1680	1.00	1.03	
73 cis-1,3-Dichloropropene	75	4.367	4.356	0.011	96	6286	1.00	1.00	
74 4-Methyl-2-pentanone (MIBK)	58	4.481	4.476	0.005	94	3819	5.00	5.10	
75 Toluene	91	4.612	4.606	0.006	97	23055	1.00	1.09	
76 trans-1,3-Dichloropropene	75	4.786	4.775	0.011	92	4715	1.00	0.9774	
77 Ethyl methacrylate	69	4.862	4.851	0.011	83	3462	1.00	0.9683	
78 1,1,2-Trichloroethane	97	4.922	4.917	0.006	88	3365	1.00	1.09	
79 Tetrachloroethene	166	5.031	5.025	0.006	97	6666	1.00	1.13	
80 1,3-Dichloropropane	76	5.058	5.053	0.005	89	5063	1.00	0.99	
81 2-Hexanone	58	5.145	5.129	0.016	94	2719	5.00	4.49	
82 Chlorodibromomethane	127	5.238	5.232	0.006	88	2389	1.00	0.9045	
83 n-Butyl acetate	43	5.254	5.238	0.016	97	2062	1.00	0.8569	
84 Ethylene Dibromide	107	5.341	5.330	0.011	81	2707	1.00	0.9797	
85 1-Chlorohexane	91	5.722	5.717	0.005	79	6767	1.00	1.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.739	5.738	0.001	96	14033	1.00	1.05	
87 1,1,1,2-Tetrachloroethane	131	5.809	5.804	0.005	88	4156	1.00	0.9301	
88 Ethylbenzene	91	5.837	5.831	0.006	97	20489	1.00	0.9713	
89 m-Xylene & p-Xylene	91	5.946	5.934	0.012	0	15028	1.00	0.9106	
90 o-Xylene	91	6.289	6.277	0.011	96	14195	1.00	0.8659	
91 Styrene	104	6.316	6.294	0.022	93	11122	1.00	0.8535	
92 Bromoform	173	6.468	6.457	0.011	93	1558	1.00	0.8618	
93 Isopropylbenzene	105	6.615	6.609	0.006	96	18509	1.00	0.9005	
94 Cyclohexanone	55	6.724	6.702	0.022	52	529	10.0	8.73	
95 Bromobenzene	77	6.893	6.876	0.017	89	6597	1.00	0.9831	
96 1,1,2,2-Tetrachloroethane	83	6.898	6.892	0.006	89	2880	1.00	1.01	
97 1,2,3-Trichloropropane	110	6.936	6.925	0.011	31	850	1.00	0.9522	
98 trans-1,4-Dichloro-2-butene	53	6.963	6.947	0.016	1	491	1.00	0.7987	
99 N-Propylbenzene	91	6.996	6.985	0.011	98	22326	1.00	0.9636	
100 2-Chlorotoluene	91	7.067	7.061	0.006	97	14360	1.00	1.00	
101 1,3,5-Trimethylbenzene	105	7.159	7.159	0.000	92	15300	1.00	0.9005	
102 4-Chlorotoluene	91	7.176	7.159	0.017	99	15706	1.00	0.9505	
103 tert-Butylbenzene	119	7.459	7.453	0.006	92	13086	1.00	0.8905	
104 1,2,4-Trimethylbenzene	105	7.513	7.502	0.011	98	15206	1.00	0.8927	
106 sec-Butylbenzene	105	7.666	7.660	0.006	94	19418	1.00	0.9120	
107 1,3-Dichlorobenzene	146	7.775	7.758	0.017	97	9269	1.00	0.9434	
108 4-Isopropyltoluene	119	7.813	7.807	0.006	96	17128	1.00	0.9066	
109 1,4-Dichlorobenzene	146	7.851	7.845	0.006	96	11438	1.00	1.08	
110 1,2,3-Trimethylbenzene	105	7.905	7.900	0.005	97	16213	1.00	0.9410	
111 Benzyl chloride	91	8.009	7.981	0.028	98	3019	1.00	1.00	
112 1,2-Dichlorobenzene	146	8.210	8.193	0.017	88	8775	1.00	0.9828	
113 n-Butylbenzene	91	8.210	8.193	0.017	97	12352	1.00	0.8249	
114 1,2-Dibromo-3-Chloropropan	157	8.972	8.950	0.022	89	473	1.00	0.9149	
115 1,3,5-Trichlorobenzene	180	9.163	9.152	0.011	98	6163	1.00	0.9416	
116 1,2,4-Trichlorobenzene	180	9.800	9.778	0.022	93	4698	1.00	0.9350	
117 Hexachlorobutadiene	225	9.979	9.979	0.000	95	2501	1.00	0.9324	
118 Naphthalene	128	10.088	10.055	0.033	98	4839	1.00	1.06	
119 1,2,3-Trichlorobenzene	180	10.371	10.349	0.022	91	3286	1.00	0.8325	
S 135 Xylenes, Total	1				0			1.78	
S 136 1,3-Dichloropropene, Total	1				0			1.97	
S 132 1,2-Dichloroethene, Total	1				0			2.01	
S 133 Trihalomethanes, Total	1				0			3.76	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

**Reagents:**

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V1\_Mega\_I\_00036  
VOA\_ISSS\_50\_W\_00026

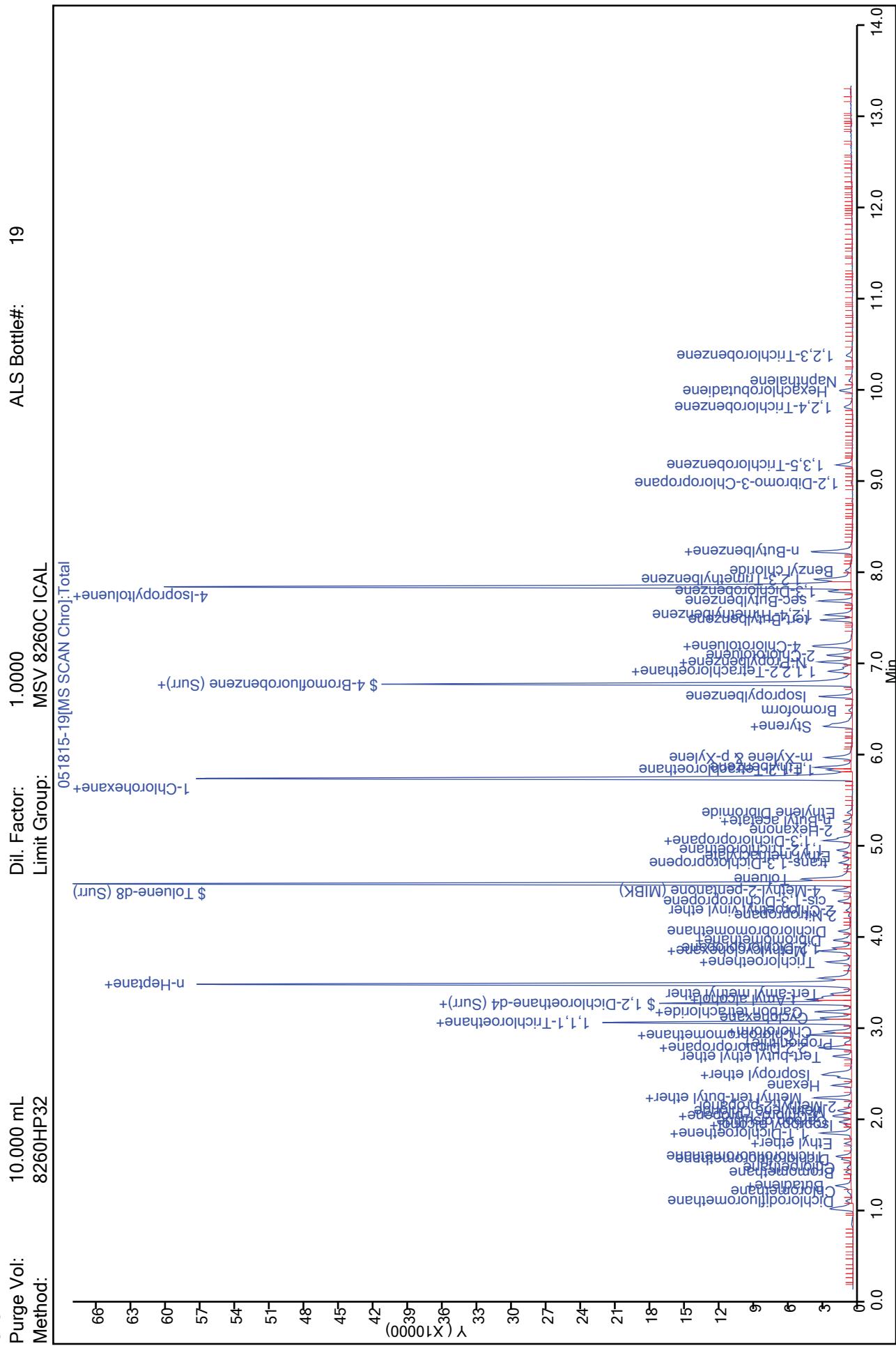
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Amount Added: 1.00	Units: uL	
Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:09

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\Nvichrom\\ChromData\\HP32\\20150518-55131.b\\051815-19.D  
18-May-2015 18:03:30  
Instrument ID: HP32  
std001

EML  
3  
Operator ID:  
Worklist Smp#:



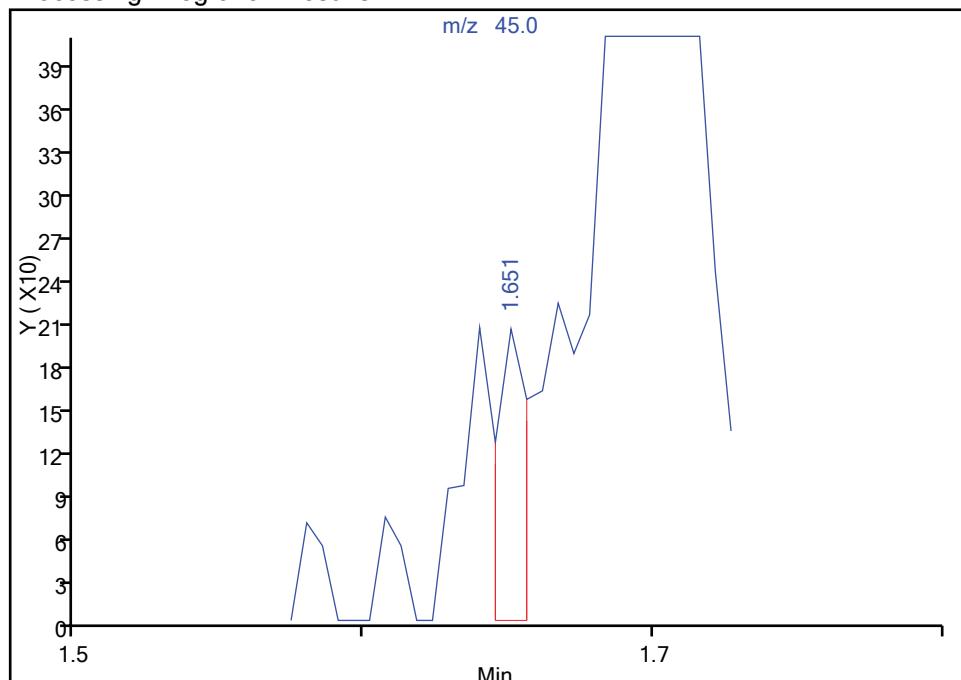
## TestAmerica Nashville

Data File: \\Nv\chrom\ChromData\HP32\20150518-55131.b\051815-19.D  
 Injection Date: 18-May-2015 18:03:30 Instrument ID: HP32  
 Lims ID: std001  
 Client ID:  
 Operator ID: EML ALS Bottle#: 19 Worklist Smp#: 3  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector: MS SCAN

## 17 Ethanol, CAS: 64-17-5

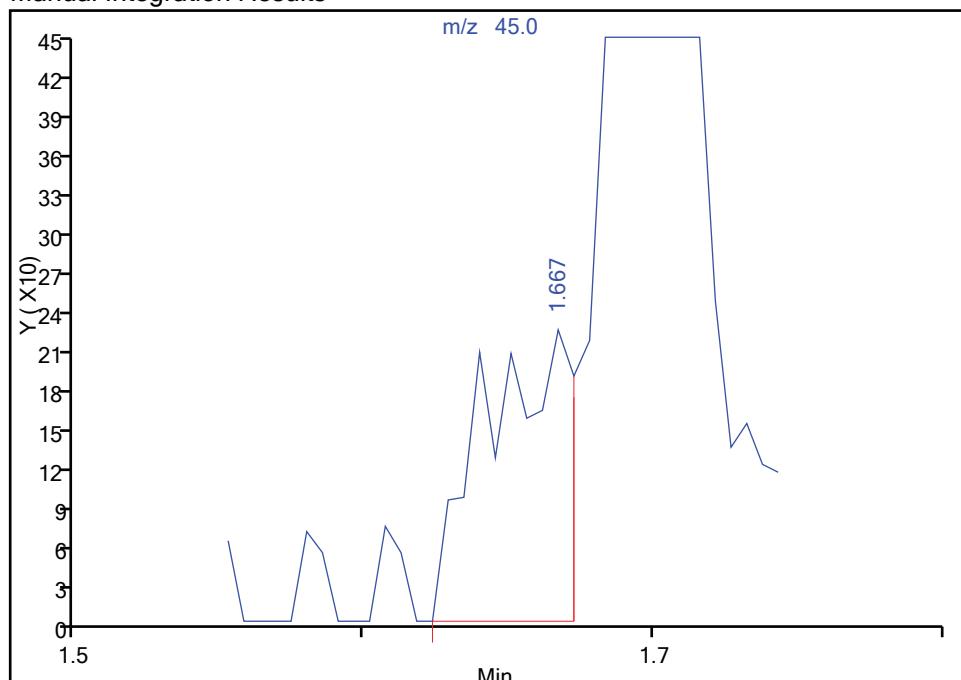
RT: 1.65  
 Area: 157  
 Amount: 8.167608  
 Amount Units: ug/l

## Processing Integration Results



RT: 1.67  
 Area: 470  
 Amount: 42.263902  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: larsene, 19-May-2015 10:25:01

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-20.D  
Lims ID: std002  
Client ID:  
Sample Type: IC Calib Level: 3  
Inject. Date: 18-May-2015 18:30:30 ALS Bottle#: 20 Worklist Smp#: 4  
Purge Vol: 10.000 mL Dil. Factor: 1.0000  
Sample Info: STD002  
Misc. Info.: 490-0055131-004  
Operator ID: EML Instrument ID: HP32  
Sublist: chrom-8260HP32\*sub14  
Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
Limit Group: MSV 8260C ICAL  
Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
Last Update: 19-May-2015 11:39:11 Calib Date: 18-May-2015 20:46:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D  
Column 1 : Det: MS SCAN  
Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:20:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	430764	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.715	-0.001	84	311844	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	94	175152	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.031	3.031	-0.001	93	104553	25.0	25.2	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.243	0.000	0	93638	25.0	25.6	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	405556	25.0	26.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.748	6.749	-0.001	97	129876	25.0	25.1	
9 Dichlorodifluoromethane	85	1.071	1.068	0.003	98	9889	2.00	2.02	
10 Chloromethane	50	1.180	1.171	0.009	98	10044	2.00	2.17	
11 Vinyl chloride	62	1.218	1.215	0.003	97	9529	2.00	1.97	
12 Butadiene	54	1.234	1.237	-0.003	88	8402	2.00	1.95	
13 Bromomethane	96	1.387	1.384	0.003	88	6677	2.00	1.90	
14 Chloroethane	64	1.436	1.433	0.003	100	6519	2.00	1.84	
15 Dichlorofluoromethane	67	1.528	1.525	0.003	97	14235	2.00	1.83	
16 Trichlorofluoromethane	101	1.561	1.558	0.003	97	16317	2.00	2.01	
17 Ethanol	45	1.664	1.656	0.008	77	740	80.0	76.4	M
18 Ethyl ether	59	1.697	1.694	0.003	86	5298	2.00	1.94	
19 Acrolein	56	1.773	1.770	0.003	96	1638	5.00	5.18	
20 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.808	-0.002	93	9722	2.00	1.98	
21 1,1-Dichloroethene	96	1.817	1.814	0.003	97	8731	2.00	1.94	
22 Acetone	58	1.849	1.846	0.003	100	1876	10.0	10.6	
23 Iodomethane	142	1.904	1.901	0.003	97	11821	2.00	1.84	
24 Isopropyl alcohol	45	1.915	1.912	0.003	25	2069	20.0	20.6	
25 Carbon disulfide	76	1.936	1.933	0.003	99	23356	2.00	1.97	
26 Acetonitrile	41	1.996	1.993	0.003	76	15189	20.0	20.0	
27 3-Chloro-1-propene	76	2.002	1.993	0.009	90	5298	NC	NC	
28 Methyl acetate	43	2.007	2.004	0.003	97	14621	10.0	9.69	
30 Methylene Chloride	84	2.062	2.059	0.003	88	10226	2.00	1.94	
31 2-Methyl-2-propanol	59	2.116	2.119	-0.003	99	3121	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.192	2.189	0.003	98	13859	20.0	18.7	
34 trans-1,2-Dichloroethene	61	2.203	2.200	0.003	88	11899	2.00	1.99	
33 Methyl tert-butyl ether	73	2.203	2.200	0.003	94	17953	2.00	1.99	
35 Hexane	57	2.339	2.336	0.003	90	12185	2.00	1.94	
36 1,1-Dichloroethane	63	2.426	2.423	0.003	96	16310	2.00	2.02	
37 Vinyl acetate	43	2.453	2.451	0.002	95	28606	4.00	3.80	
38 Isopropyl ether	45	2.459	2.456	0.003	69	23252	2.00	1.98	
39 2-Chloro-1,3-butadiene	53	2.475	2.472	0.003	91	13273	2.00	1.97	
40 Tert-butyl ethyl ether	59	2.660	2.657	0.003	97	20856	2.00	1.92	
42 cis-1,2-Dichloroethene	61	2.753	2.750	0.003	68	13683	2.00	1.91	
41 2,2-Dichloropropane	77	2.747	2.750	-0.003	83	13810	2.00	1.97	
43 2-Butanone (MEK)	72	2.775	2.766	0.009	96	2361	10.0	9.36	
44 Ethyl acetate	43	2.796	2.788	0.008	98	9057	4.00	4.75	
45 Propionitrile	54	2.807	2.804	0.003	99	5479	20.0	20.2	
46 Methacrylonitrile	41	2.889	2.886	0.003	87	22277	20.0	18.1	
47 Chlorobromomethane	130	2.894	2.892	0.002	59	6047	2.00	2.04	
48 Tetrahydrofuran	42	2.933	2.930	0.003	37	1996	4.00	3.49	
49 Chloroform	83	2.933	2.930	0.003	92	19797	2.00	1.95	
50 1,1,1-Trichloroethane	97	3.047	3.044	0.003	96	15260	2.00	1.96	
51 Cyclohexane	56	3.079	3.077	0.002	87	15559	2.00	1.98	
53 1,1-Dichloropropene	75	3.145	3.142	0.003	95	13087	2.00	1.98	
54 Carbon tetrachloride	117	3.145	3.147	-0.002	96	13629	2.00	1.98	
55 Isobutyl alcohol	43	3.226	3.224	0.002	90	3109	50.0	46.6	
56 Benzene	78	3.281	3.278	0.003	94	38724	2.00	1.98	
57 t-Amyl alcohol	59	3.286	3.283	0.003	41	2859	20.0	21.0	
58 1,2-Dichloroethane	62	3.286	3.289	-0.003	97	10185	2.00	1.99	
59 Tert-amyl methyl ether	73	3.346	3.343	0.003	99	18393	2.00	1.91	
60 n-Heptane	43	3.428	3.425	0.003	89	10627	2.00	1.94	
61 n-Butanol	56	3.678	3.665	0.014	88	2184	50.0	48.6	
62 Trichloroethene	130	3.689	3.692	-0.003	97	11389	2.00	1.99	
63 Ethyl acrylate	55	3.776	3.762	0.014	95	4161	2.00	1.67	
64 Methylcyclohexane	83	3.814	3.817	-0.003	86	17006	2.00	1.93	
65 1,2-Dichloropropane	63	3.847	3.844	0.003	94	8881	2.00	1.99	
66 Methyl methacrylate	41	3.934	3.920	0.014	86	7327	4.00	3.79	
67 Dibromomethane	93	3.929	3.926	0.003	78	4289	2.00	1.94	
68 1,4-Dioxane	88	3.967	3.958	0.009	24	718	40.0	42.1	
70 Dichlorobromomethane	83	4.032	4.029	0.003	98	10960	2.00	1.87	
71 2-Nitropropane	43	4.206	4.198	0.008	94	2024	4.00	3.55	
72 2-Chloroethyl vinyl ether	63	4.261	4.247	0.014	92	3243	2.00	1.98	
73 cis-1,3-Dichloropropene	75	4.359	4.356	0.003	96	12140	2.00	1.91	
74 4-Methyl-2-pentanone (MIBK)	58	4.484	4.476	0.008	94	7604	10.0	10.1	
75 Toluene	91	4.609	4.606	0.003	98	44741	2.00	2.11	
76 trans-1,3-Dichloropropene	75	4.783	4.775	0.008	92	9067	2.00	1.87	
77 Ethyl methacrylate	69	4.865	4.851	0.014	86	7086	2.00	1.97	
78 1,1,2-Trichloroethane	97	4.925	4.917	0.009	92	6341	2.00	2.05	
79 Tetrachloroethene	166	5.028	5.025	0.003	96	12334	2.00	2.07	
80 1,3-Dichloropropane	76	5.055	5.053	0.002	89	10383	2.00	2.02	
81 2-Hexanone	58	5.148	5.129	0.019	92	6219	10.0	10.2	
82 Chlorodibromomethane	127	5.235	5.232	0.003	91	4986	2.00	1.88	
83 n-Butyl acetate	43	5.251	5.238	0.013	96	4364	2.00	1.78	
84 Ethylene Dibromide	107	5.333	5.330	0.003	98	5476	2.00	1.97	
85 1-Chlorohexane	91	5.720	5.717	0.003	94	12247	2.00	1.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.741	5.738	0.003	98	27420	2.00	2.04	
87 1,1,1,2-Tetrachloroethane	131	5.807	5.804	0.003	92	8556	2.00	1.91	
88 Ethylbenzene	91	5.834	5.831	0.003	98	40433	2.00	1.91	
89 m-Xylene & p-Xylene	91	5.943	5.934	0.009	0	32200	2.00	1.94	
90 o-Xylene	91	6.286	6.277	0.009	95	29928	2.00	1.82	
91 Styrene	104	6.307	6.294	0.013	95	24324	2.00	1.86	
92 Bromoform	173	6.460	6.457	0.003	96	3237	2.00	1.78	
93 Isopropylbenzene	105	6.612	6.609	0.003	96	38221	2.00	1.85	
94 Cyclohexanone	55	6.721	6.702	0.019	86	1635	20.0	25.1	
95 Bromobenzene	77	6.890	6.876	0.014	90	12744	2.00	1.86	
96 1,1,2,2-Tetrachloroethane	83	6.901	6.892	0.009	94	5745	2.00	1.98	
97 1,2,3-Trichloropropane	110	6.933	6.925	0.008	16	1830	2.00	2.01	
98 trans-1,4-Dichloro-2-butene	53	6.966	6.947	0.019	86	1030	2.00	1.64	
99 N-Propylbenzene	91	6.993	6.985	0.008	99	44681	2.00	1.89	
100 2-Chlorotoluene	91	7.064	7.061	0.003	97	29584	2.00	2.01	
101 1,3,5-Trimethylbenzene	105	7.162	7.159	0.003	95	32957	2.00	1.90	
102 4-Chlorotoluene	91	7.173	7.159	0.014	98	32084	2.00	1.90	
103 tert-Butylbenzene	119	7.456	7.453	0.003	93	27482	2.00	1.83	
104 1,2,4-Trimethylbenzene	105	7.510	7.502	0.008	97	32238	2.00	1.85	
106 sec-Butylbenzene	105	7.663	7.660	0.003	94	41191	2.00	1.89	
107 1,3-Dichlorobenzene	146	7.766	7.758	0.008	98	19334	2.00	1.92	
108 4-Isopropyltoluene	119	7.810	7.807	0.003	96	35702	2.00	1.85	
109 1,4-Dichlorobenzene	146	7.848	7.845	0.003	95	22089	2.00	2.03	
110 1,2,3-Trimethylbenzene	105	7.902	7.900	0.002	98	34144	2.00	1.94	
111 Benzyl chloride	91	7.995	7.981	0.014	98	7543	2.00	1.82	
112 1,2-Dichlorobenzene	146	8.202	8.193	0.009	76	18006	2.00	1.97	
113 n-Butylbenzene	91	8.202	8.193	0.009	96	26580	2.00	1.74	
114 1,2-Dibromo-3-Chloropropan	157	8.958	8.950	0.008	82	941	2.00	1.78	
115 1,3,5-Trichlorobenzene	180	9.160	9.152	0.008	97	11776	2.00	1.76	
116 1,2,4-Trichlorobenzene	180	9.797	9.778	0.019	94	8725	2.00	1.70	
117 Hexachlorobutadiene	225	9.987	9.979	0.008	97	5110	2.00	1.86	
118 Naphthalene	128	10.080	10.055	0.025	96	11138	2.00	1.78	
119 1,2,3-Trichlorobenzene	180	10.368	10.349	0.019	95	7465	2.00	1.85	
S 135 Xylenes, Total	1				0			3.76	
S 136 1,3-Dichloropropene, Total	1				0			3.78	
S 132 1,2-Dichloroethene, Total	1				0			3.90	
S 133 Trihalomethanes, Total	1				0			7.48	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

**Reagents:**

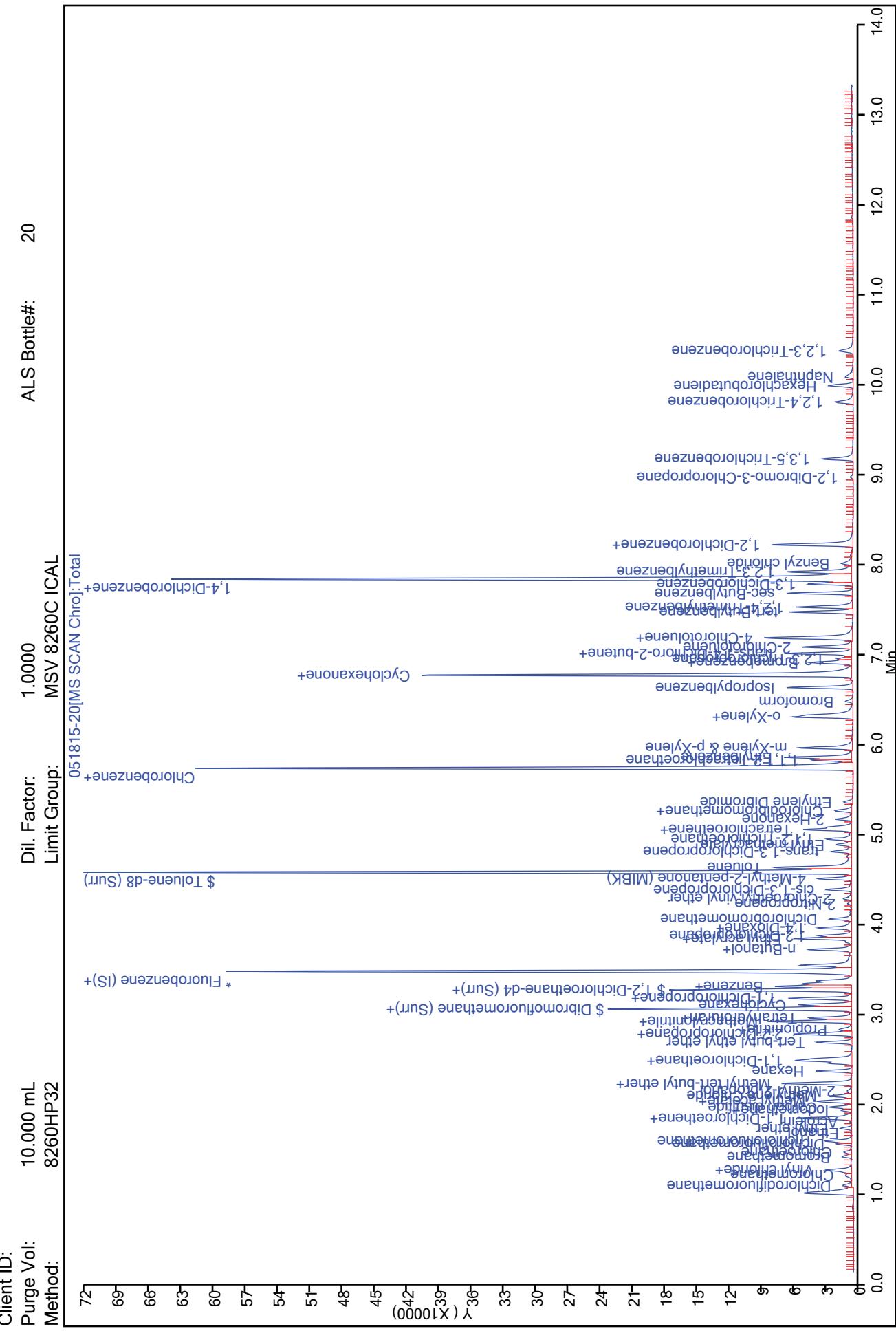
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VOA\_ISSS\_50\_W\_00026

Amount Added: 2.00 Units: uL  
Amount Added: 2.00 Units: uL  
Amount Added: 5.00 Units: uL Run Reagent

Report Date: 19-May-2015 11:39:12

Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\N\chrom\ChromData\HP32\20150518-55131.b\051815-20.D  
Injection Date: 18-May-2015 18:30:30  
Lims ID: std002  
Instrument ID: HP32



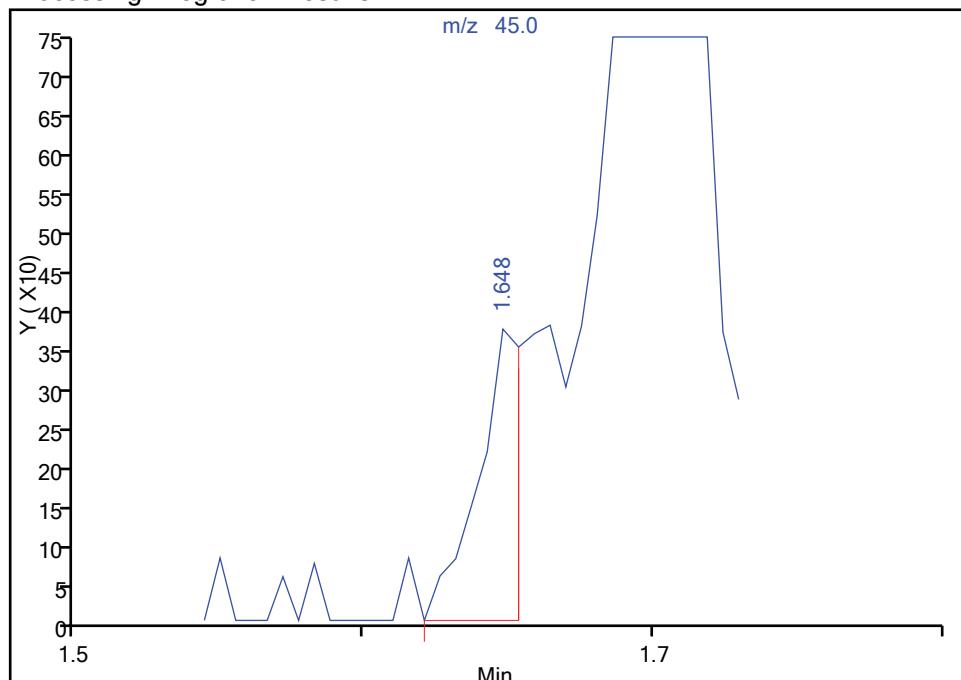
## TestAmerica Nashville

Data File: \\Nv\chrom\ChromData\HP32\20150518-55131.b\051815-20.D  
 Injection Date: 18-May-2015 18:30:30 Instrument ID: HP32  
 Lims ID: std002  
 Client ID:  
 Operator ID: EML ALS Bottle#: 20 Worklist Smp#: 4  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Column: Detector: MS SCAN

## 17 Ethanol, CAS: 64-17-5

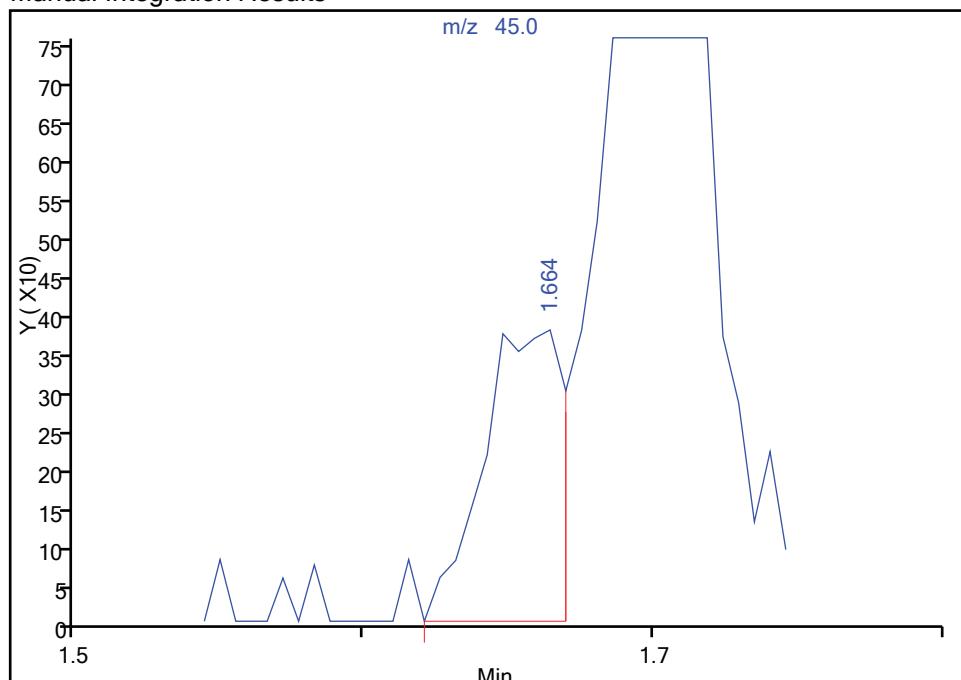
RT: 1.65  
 Area: 399  
 Amount: 37.927436  
 Amount Units: ug/l

## Processing Integration Results



RT: 1.66  
 Area: 740  
 Amount: 76.435628  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: larsene, 19-May-2015 10:28:46

Audit Action: Manually Integrated

Audit Reason: Split Peak

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-21.D  
 Lims ID: std010  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 18-May-2015 18:57:30 ALS Bottle#: 21 Worklist Smp#: 5  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: STD010  
 Misc. Info.: 490-0055131-005  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:14 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:20:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	431997	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.715	-0.001	85	323786	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	94	183555	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.030	3.031	-0.001	94	104880	25.0	25.2	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.243	0.000	0	92998	25.0	25.4	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	93	409199	25.0	25.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.748	6.749	-0.001	95	137169	25.0	25.3	
9 Dichlorodifluoromethane	85	1.065	1.068	-0.003	99	50663	10.0	10.3	
10 Chloromethane	50	1.174	1.171	0.003	98	43394	10.0	10.1	
11 Vinyl chloride	62	1.218	1.215	0.003	98	47414	10.0	9.75	
12 Butadiene	54	1.234	1.237	-0.003	90	41927	10.0	9.69	
13 Bromomethane	96	1.387	1.384	0.002	90	32702	10.0	9.30	
14 Chloroethane	64	1.436	1.433	0.003	100	30339	10.0	9.58	
15 Dichlorofluoromethane	67	1.528	1.525	0.003	97	78915	10.0	10.1	
16 Trichlorofluoromethane	101	1.561	1.558	0.003	98	79468	10.0	9.76	
17 Ethanol	45	1.664	1.656	0.008	97	3054	400.0	377.0	
18 Ethyl ether	59	1.697	1.694	0.003	86	26181	10.0	9.58	
19 Acrolein	56	1.768	1.770	-0.002	98	7629	25.0	24.0	
20 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.808	-0.002	93	47361	10.0	9.63	
21 1,1-Dichloroethene	96	1.817	1.814	0.003	97	43650	10.0	9.65	
22 Acetone	58	1.844	1.846	-0.002	100	8547	50.0	52.3	
23 Iodomethane	142	1.898	1.901	-0.003	98	63112	10.0	9.80	
24 Isopropyl alcohol	45	1.915	1.912	0.003	99	8495	100.0	94.0	
25 Carbon disulfide	76	1.936	1.933	0.003	99	118204	10.0	9.92	
26 Acetonitrile	41	1.996	1.993	0.003	75	72720	100.0	95.3	
27 3-Chloro-1-propene	76	1.996	1.993	0.003	91	25688	NC	NC	
28 Methyl acetate	43	2.007	2.004	0.003	96	72786	50.0	48.1	
30 Methylene Chloride	84	2.061	2.059	0.002	87	45793	10.0	10.1	
31 2-Methyl-2-propanol	59	2.116	2.119	-0.003	98	15617	100.0	100.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.192	2.189	0.003	99	71403	100.0	96.0	
34 trans-1,2-Dichloroethene	61	2.198	2.200	-0.002	82	57072	10.0	9.51	
33 Methyl tert-butyl ether	73	2.203	2.200	0.003	94	86715	10.0	9.57	
35 Hexane	57	2.339	2.336	0.003	90	60636	10.0	9.64	
36 1,1-Dichloroethane	63	2.426	2.423	0.003	96	78705	10.0	9.71	
37 Vinyl acetate	43	2.453	2.451	0.002	98	149113	20.0	19.7	
38 Isopropyl ether	45	2.453	2.456	-0.003	84	113716	10.0	9.64	
39 2-Chloro-1,3-butadiene	53	2.475	2.472	0.003	91	66590	10.0	9.86	
40 Tert-butyl ethyl ether	59	2.655	2.657	-0.002	97	105269	10.0	9.68	
42 cis-1,2-Dichloroethene	61	2.753	2.750	0.003	80	66826	10.0	9.30	
41 2,2-Dichloropropane	77	2.747	2.750	-0.003	87	65508	10.0	9.34	
43 2-Butanone (MEK)	72	2.769	2.766	0.003	99	12388	50.0	49.0	
44 Ethyl acetate	43	2.791	2.788	0.003	99	39144	20.0	20.5	
45 Propionitrile	54	2.807	2.804	0.003	99	27100	100.0	99.5	
46 Methacrylonitrile	41	2.889	2.886	0.003	92	127248	100.0	103.3	
47 Chlorobromomethane	130	2.889	2.892	-0.003	74	29214	10.0	9.82	
48 Tetrahydrofuran	42	2.932	2.930	0.002	39	10410	20.0	18.2	
49 Chloroform	83	2.927	2.930	-0.003	93	86937	10.0	10.2	
50 1,1,1-Trichloroethane	97	3.047	3.044	0.003	97	76043	10.0	9.74	
51 Cyclohexane	56	3.079	3.077	0.002	87	75096	10.0	9.51	
53 1,1-Dichloropropene	75	3.145	3.142	0.003	95	63958	10.0	9.64	
54 Carbon tetrachloride	117	3.145	3.147	-0.002	96	66872	10.0	9.69	
55 Isobutyl alcohol	43	3.221	3.224	-0.003	91	15130	250.0	226.2	
56 Benzene	78	3.275	3.278	-0.003	95	194236	10.0	9.90	
57 t-Amyl alcohol	59	3.281	3.283	-0.002	40	11821	100.0	86.7	
58 1,2-Dichloroethane	62	3.292	3.289	0.003	97	48677	10.0	9.46	
59 Tert-amyl methyl ether	73	3.341	3.343	-0.002	97	92051	10.0	9.53	
60 n-Heptane	43	3.428	3.425	0.003	89	52022	10.0	9.46	
61 n-Butanol	56	3.667	3.665	0.003	87	10420	250.0	231.3	
62 Trichloroethene	130	3.689	3.692	-0.003	97	55124	10.0	9.62	
63 Ethyl acrylate	55	3.771	3.762	0.009	98	24361	10.0	9.73	
64 Methylcyclohexane	83	3.814	3.817	-0.003	86	84470	10.0	9.54	
65 1,2-Dichloropropane	63	3.842	3.844	-0.002	94	42666	10.0	9.55	
66 Methyl methacrylate	41	3.929	3.920	0.009	86	37889	20.0	19.5	
67 Dibromomethane	93	3.929	3.926	0.003	90	22054	10.0	9.96	
68 1,4-Dioxane	88	3.956	3.958	-0.002	85	3392	200.0	198.2	
70 Dichlorobromomethane	83	4.032	4.029	0.003	99	57395	10.0	9.78	
71 2-Nitropropane	43	4.201	4.198	0.003	98	10509	20.0	18.4	
72 2-Chloroethyl vinyl ether	63	4.255	4.247	0.008	91	16242	10.0	9.57	
73 cis-1,3-Dichloropropene	75	4.359	4.356	0.003	96	63588	10.0	9.66	
74 4-Methyl-2-pentanone (MIBK)	58	4.478	4.476	0.002	96	38512	50.0	49.3	
75 Toluene	91	4.604	4.606	-0.002	99	214649	10.0	9.76	
76 trans-1,3-Dichloropropene	75	4.778	4.775	0.003	92	48947	10.0	9.72	
77 Ethyl methacrylate	69	4.854	4.851	0.003	86	36104	10.0	9.68	
78 1,1,2-Trichloroethane	97	4.919	4.917	0.003	91	31361	10.0	9.74	
79 Tetrachloroethene	166	5.028	5.025	0.003	98	58476	10.0	9.46	
80 1,3-Dichloropropane	76	5.055	5.053	0.002	88	52129	10.0	9.79	
81 2-Hexanone	58	5.137	5.129	0.008	95	31280	50.0	49.5	
82 Chlorodibromomethane	127	5.235	5.232	0.003	90	26247	10.0	9.52	
83 n-Butyl acetate	43	5.240	5.238	0.002	98	23321	10.0	9.50	
84 Ethylene Dibromide	107	5.333	5.330	0.003	97	27532	10.0	9.55	
85 1-Chlorohexane	91	5.720	5.717	0.003	91	63964	10.0	9.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.736	5.738	-0.002	97	134876	10.0	9.68	
87 1,1,1,2-Tetrachloroethane	131	5.807	5.804	0.003	94	45598	10.0	9.78	
88 Ethylbenzene	91	5.834	5.831	0.003	97	216241	10.0	9.82	
89 m-Xylene & p-Xylene	91	5.937	5.934	0.003	0	172212	10.0	10.0	
90 o-Xylene	91	6.280	6.277	0.003	96	171643	10.0	10.0	
91 Styrene	104	6.297	6.294	0.002	94	141571	10.0	10.4	
92 Bromoform	173	6.454	6.457	-0.003	98	17320	10.0	9.18	
93 Isopropylbenzene	105	6.612	6.609	0.003	95	217930	10.0	10.2	
94 Cyclohexanone	55	6.710	6.702	0.008	90	6203	100.0	92.8	
95 Bromobenzene	77	6.884	6.876	0.008	88	67388	10.0	9.37	
96 1,1,2,2-Tetrachloroethane	83	6.890	6.892	-0.002	95	30042	10.0	9.86	
97 1,2,3-Trichloropropane	110	6.928	6.925	0.003	39	9251	10.0	9.67	
98 trans-1,4-Dichloro-2-butene	53	6.950	6.947	0.003	61	7328	10.0	11.1	
99 N-Propylbenzene	91	6.988	6.985	0.003	98	252768	10.0	10.2	
100 2-Chlorotoluene	91	7.059	7.061	-0.002	97	152003	10.0	9.88	
101 1,3,5-Trimethylbenzene	105	7.157	7.159	-0.002	95	185908	10.0	10.2	
102 4-Chlorotoluene	91	7.167	7.159	0.008	98	178370	10.0	10.1	
103 tert-Butylbenzene	119	7.456	7.453	0.003	92	157840	10.0	10.0	
104 1,2,4-Trimethylbenzene	105	7.505	7.502	0.003	97	190355	10.0	10.4	
106 sec-Butylbenzene	105	7.663	7.660	0.003	94	232519	10.0	10.2	
107 1,3-Dichlorobenzene	146	7.761	7.758	0.003	99	104827	10.0	9.96	
108 4-Isopropyltoluene	119	7.810	7.807	0.003	97	206837	10.0	10.2	
109 1,4-Dichlorobenzene	146	7.842	7.845	-0.003	96	109548	10.0	9.61	
110 1,2,3-Trimethylbenzene	105	7.897	7.900	-0.003	98	186575	10.0	10.1	
111 Benzyl chloride	91	7.984	7.981	0.003	98	41971	10.0	7.83	
112 1,2-Dichlorobenzene	146	8.196	8.193	0.003	96	94856	10.0	9.92	
113 n-Butylbenzene	91	8.196	8.193	0.003	97	161699	10.0	10.1	
114 1,2-Dibromo-3-Chloropropan	157	8.953	8.950	0.003	91	5638	10.0	10.2	
115 1,3,5-Trichlorobenzene	180	9.154	9.152	0.002	97	66739	10.0	9.52	
116 1,2,4-Trichlorobenzene	180	9.786	9.778	0.008	93	51255	10.0	9.52	
117 Hexachlorobutadiene	225	9.982	9.979	0.003	92	26903	10.0	9.36	
118 Naphthalene	128	10.063	10.055	0.008	97	75526	10.0	8.86	
119 1,2,3-Trichlorobenzene	180	10.357	10.349	0.008	96	41448	10.0	9.80	
S 135 Xylenes, Total	1				0			20.0	
S 136 1,3-Dichloropropene, Total	1				0			19.4	
S 132 1,2-Dichloroethene, Total	1				0			18.8	
S 133 Trihalomethanes, Total	1				0			38.7	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

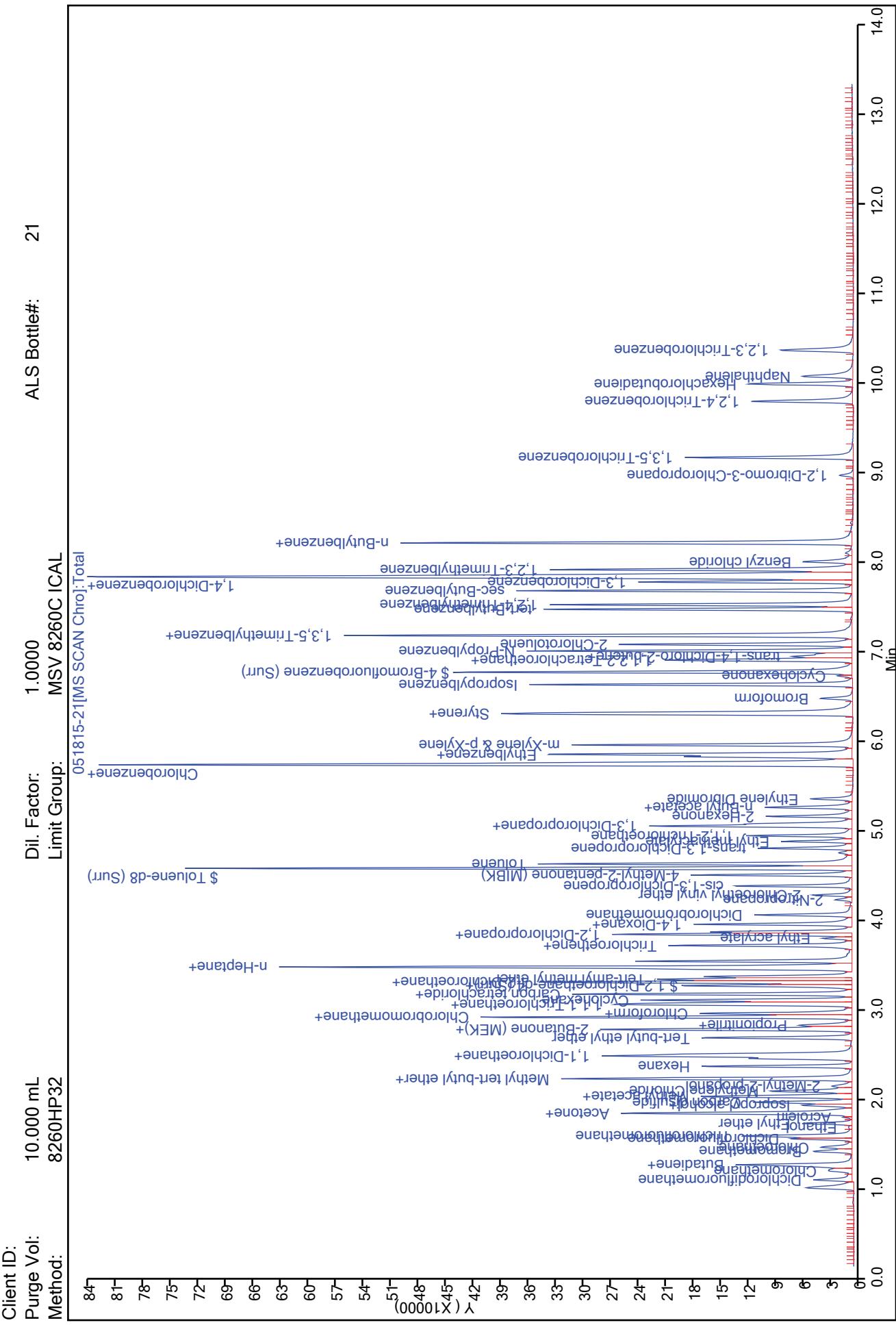
**Reagents:**

V1_gases_I_00104	Amount Added: 10.00	Units: uL	
V1_Mega_I_00036	Amount Added: 10.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:15

Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\Nv\chrom\ChromData\HP32\2015\0518-55131.b\051815-21.D  
Injection Date: 18-May-2015 18:57:30  
Lims ID: std010  
Instrument ID: HP32  
TestAmerica Nashville



TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-22.D  
 Lims ID: std020  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 18-May-2015 19:24:30 ALS Bottle#: 22 Worklist Smp#: 6  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: STD020  
 Misc. Info.: 490-0055131-006  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:17 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 09:12:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.450	0.002	99	440747	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.715	-0.004	85	331007	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.821	0.002	95	189688	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.031	-0.004	94	107243	25.0	25.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.243	-0.003	0	93579	25.0	25.0	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.555	-0.003	93	413256	25.0	25.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.749	0.002	95	143112	25.0	25.5	
9 Dichlorodifluoromethane	85	1.068	1.068	0.000	99	99842	20.0	19.9	
10 Chloromethane	50	1.182	1.171	0.011	99	84801	20.0	19.5	
11 Vinyl chloride	62	1.220	1.215	0.005	98	94557	20.0	19.1	
12 Butadiene	54	1.237	1.237	0.000	89	84727	20.0	19.2	
13 Bromomethane	96	1.384	1.384	0.000	92	65965	20.0	18.4	
14 Chloroethane	64	1.432	1.433	-0.001	100	64056	20.0	20.1	
15 Dichlorofluoromethane	67	1.525	1.525	0.000	97	157788	20.0	19.9	
16 Trichlorofluoromethane	101	1.558	1.558	0.000	98	158151	20.0	19.0	
17 Ethanol	45	1.661	1.656	0.005	93	6614	800.0	822.8	
18 Ethyl ether	59	1.699	1.694	0.005	88	53618	20.0	19.2	
19 Acrolein	56	1.770	1.770	0.000	97	14429	50.0	44.6	
20 1,1,2-Trichloro-1,2,2-trif	101	1.808	1.808	0.000	93	95505	20.0	19.0	
21 1,1-Dichloroethene	96	1.814	1.814	0.000	96	88016	20.0	19.1	
22 Acetone	58	1.846	1.846	0.000	100	15984	100.0	96.8	
23 Iodomethane	142	1.901	1.901	0.000	98	131972	20.0	20.1	
24 Isopropyl alcohol	45	1.912	1.912	0.000	100	18493	200.0	204.1	
25 Carbon disulfide	76	1.939	1.933	0.006	99	241511	20.0	19.9	
26 Acetonitrile	41	1.993	1.993	0.000	74	147710	200.0	189.7	
27 3-Chloro-1-propene	76	1.993	1.993	0.000	91	54201	NC	NC	
28 Methyl acetate	43	2.004	2.004	0.000	96	149996	100.0	97.2	
30 Methylene Chloride	84	2.058	2.059	-0.001	88	90433	20.0	19.9	
31 2-Methyl-2-propanol	59	2.118	2.119	-0.001	99	31828	200.0	200.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.189	2.189	0.000	98	144684	200.0	190.7	
34 trans-1,2-Dichloroethene	61	2.200	2.200	0.000	82	116136	20.0	19.0	
33 Methyl tert-butyl ether	73	2.200	2.200	0.000	94	177958	20.0	19.3	
35 Hexane	57	2.336	2.336	0.000	91	122998	20.0	19.2	
36 1,1-Dichloroethane	63	2.423	2.423	0.000	96	157132	20.0	19.0	
37 Vinyl acetate	43	2.450	2.451	-0.001	98	305224	40.0	39.6	
38 Isopropyl ether	45	2.456	2.456	0.000	82	233873	20.0	19.4	
39 2-Chloro-1,3-butadiene	53	2.472	2.472	0.000	91	134027	20.0	19.4	
40 Tert-butyl ethyl ether	59	2.657	2.657	0.000	96	215696	20.0	19.4	
42 cis-1,2-Dichloroethene	61	2.750	2.750	0.000	80	134658	20.0	18.4	
41 2,2-Dichloropropane	77	2.750	2.750	0.000	75	136036	20.0	19.0	
43 2-Butanone (MEK)	72	2.766	2.766	0.000	97	25810	100.0	100.0	
44 Ethyl acetate	43	2.788	2.788	0.000	99	83702	40.0	42.9	
45 Propionitrile	54	2.804	2.804	0.000	99	52711	200.0	189.8	
46 Methacrylonitrile	41	2.886	2.886	0.000	90	244837	200.0	194.9	
47 Chlorobromomethane	130	2.891	2.892	-0.001	78	60356	20.0	19.9	
48 Tetrahydrofuran	42	2.929	2.930	-0.001	67	21944	40.0	37.5	
49 Chloroform	83	2.929	2.930	-0.001	93	171756	20.0	20.2	
50 1,1,1-Trichloroethane	97	3.044	3.044	0.000	98	154135	20.0	19.3	
51 Cyclohexane	56	3.076	3.077	-0.001	87	153972	20.0	19.1	
53 1,1-Dichloropropene	75	3.147	3.142	0.005	95	130682	20.0	19.3	
54 Carbon tetrachloride	117	3.147	3.147	0.000	95	137474	20.0	19.5	
55 Isobutyl alcohol	43	3.223	3.224	-0.001	95	32989	500.0	483.5	
56 Benzene	78	3.278	3.278	0.000	96	389460	20.0	19.5	
57 t-Amyl alcohol	59	3.283	3.283	0.000	67	24969	200.0	179.4	
58 1,2-Dichloroethane	62	3.289	3.289	0.000	98	101325	20.0	19.3	
59 Tert-amyl methyl ether	73	3.343	3.343	0.000	98	192388	20.0	19.5	
60 n-Heptane	43	3.425	3.425	0.000	87	106390	20.0	19.0	
61 n-Butanol	56	3.664	3.665	0.000	85	21706	500.0	472.4	
62 Trichloroethene	130	3.692	3.692	0.000	96	113355	20.0	19.4	
63 Ethyl acrylate	55	3.768	3.762	0.006	98	50698	20.0	19.9	
64 Methylcyclohexane	83	3.817	3.817	0.000	86	174385	20.0	19.3	
65 1,2-Dichloropropane	63	3.844	3.844	0.000	94	87041	20.0	19.1	
66 Methyl methacrylate	41	3.926	3.920	0.006	89	76573	40.0	38.7	
67 Dibromomethane	93	3.926	3.926	0.000	89	44361	20.0	19.6	
68 1,4-Dioxane	88	3.958	3.958	0.000	85	6092	400.0	348.9	
70 Dichlorobromomethane	83	4.029	4.029	0.000	99	117718	20.0	19.7	
71 2-Nitropropane	43	4.203	4.198	0.005	98	21880	40.0	37.5	
72 2-Chloroethyl vinyl ether	63	4.252	4.247	0.005	91	33256	20.0	19.2	
73 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	133046	20.0	19.8	
74 4-Methyl-2-pentanone (MIBK)	58	4.481	4.476	0.005	95	80482	100.0	100.7	
75 Toluene	91	4.606	4.606	0.000	98	436904	20.0	19.4	
76 trans-1,3-Dichloropropene	75	4.775	4.775	0.000	91	101448	20.0	19.7	
77 Ethyl methacrylate	69	4.856	4.851	0.005	86	74860	20.0	19.6	
78 1,1,2-Trichloroethane	97	4.922	4.917	0.006	91	63692	20.0	19.4	
79 Tetrachloroethene	166	5.025	5.025	0.000	98	119939	20.0	19.0	
80 1,3-Dichloropropane	76	5.052	5.053	-0.001	88	104257	20.0	19.1	
81 2-Hexanone	58	5.134	5.129	0.005	94	65888	100.0	102.0	
82 Chlorodibromomethane	127	5.232	5.232	0.000	90	55861	20.0	19.8	
83 n-Butyl acetate	43	5.237	5.238	-0.001	98	49558	20.0	19.8	
84 Ethylene Dibromide	107	5.330	5.330	0.000	98	59001	20.0	20.0	
85 1-Chlorohexane	91	5.717	5.717	-0.001	93	132166	20.0	19.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.738	5.738	0.000	97	274535	20.0	19.3	
87 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	95620	20.0	20.1	
88 Ethylbenzene	91	5.831	5.831	0.000	98	456620	20.0	20.3	
89 m-Xylene & p-Xylene	91	5.934	5.934	0.000	0	359184	20.0	20.4	
90 o-Xylene	91	6.283	6.277	0.006	96	367606	20.0	21.0	
91 Styrene	104	6.299	6.294	0.005	95	293111	20.0	21.1	
92 Bromoform	173	6.457	6.457	0.000	97	37859	20.0	19.6	
93 Isopropylbenzene	105	6.609	6.609	0.000	95	466457	20.0	21.3	
94 Cyclohexanone	55	6.707	6.702	0.005	90	13767	200.0	201.1	
95 Bromobenzene	77	6.881	6.876	0.005	88	141500	20.0	19.0	
96 1,1,2,2-Tetrachloroethane	83	6.892	6.892	0.000	95	60726	20.0	19.3	
97 1,2,3-Trichloropropane	110	6.930	6.925	0.005	26	20014	20.0	20.3	
98 trans-1,4-Dichloro-2-butene	53	6.952	6.947	0.005	71	13190	20.0	19.4	
99 N-Propylbenzene	91	6.985	6.985	0.000	99	535297	20.0	20.9	
100 2-Chlorotoluene	91	7.061	7.061	0.000	98	317230	20.0	19.9	
101 1,3,5-Trimethylbenzene	105	7.159	7.159	0.000	95	397070	20.0	21.1	
102 4-Chlorotoluene	91	7.164	7.159	0.005	98	371802	20.0	20.3	
103 tert-Butylbenzene	119	7.453	7.453	0.000	92	338707	20.0	20.8	
104 1,2,4-Trimethylbenzene	105	7.507	7.502	0.005	97	401521	20.0	21.3	
106 sec-Butylbenzene	105	7.660	7.660	0.000	94	493500	20.0	20.9	
107 1,3-Dichlorobenzene	146	7.758	7.758	0.000	98	217316	20.0	20.0	
108 4-Isopropyltoluene	119	7.807	7.807	0.000	97	433480	20.0	20.7	
109 1,4-Dichlorobenzene	146	7.845	7.845	0.000	95	222155	20.0	18.9	
110 1,2,3-Trimethylbenzene	105	7.899	7.900	-0.001	98	390963	20.0	20.5	
111 Benzyl chloride	91	7.981	7.981	0.000	98	95954	20.0	17.0	
112 1,2-Dichlorobenzene	146	8.193	8.193	0.000	97	196351	20.0	19.9	
113 n-Butylbenzene	91	8.199	8.193	0.006	97	351848	20.0	21.2	
114 1,2-Dibromo-3-Chloropropan	157	8.950	8.950	0.000	90	11227	20.0	19.6	
115 1,3,5-Trichlorobenzene	180	9.151	9.152	-0.001	98	146554	20.0	20.2	
116 1,2,4-Trichlorobenzene	180	9.783	9.778	0.005	94	114270	20.0	20.5	
117 Hexachlorobutadiene	225	9.979	9.979	0.000	97	57160	20.0	19.2	
118 Naphthalene	128	10.060	10.055	0.005	96	179561	20.0	19.7	
119 1,2,3-Trichlorobenzene	180	10.354	10.349	0.005	95	91911	20.0	21.0	
S 135 Xylenes, Total	1				0			41.4	
S 136 1,3-Dichloropropene, Total	1				0			39.5	
S 132 1,2-Dichloroethene, Total	1				0			37.3	
S 133 Trihalomethanes, Total	1				0			79.3	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

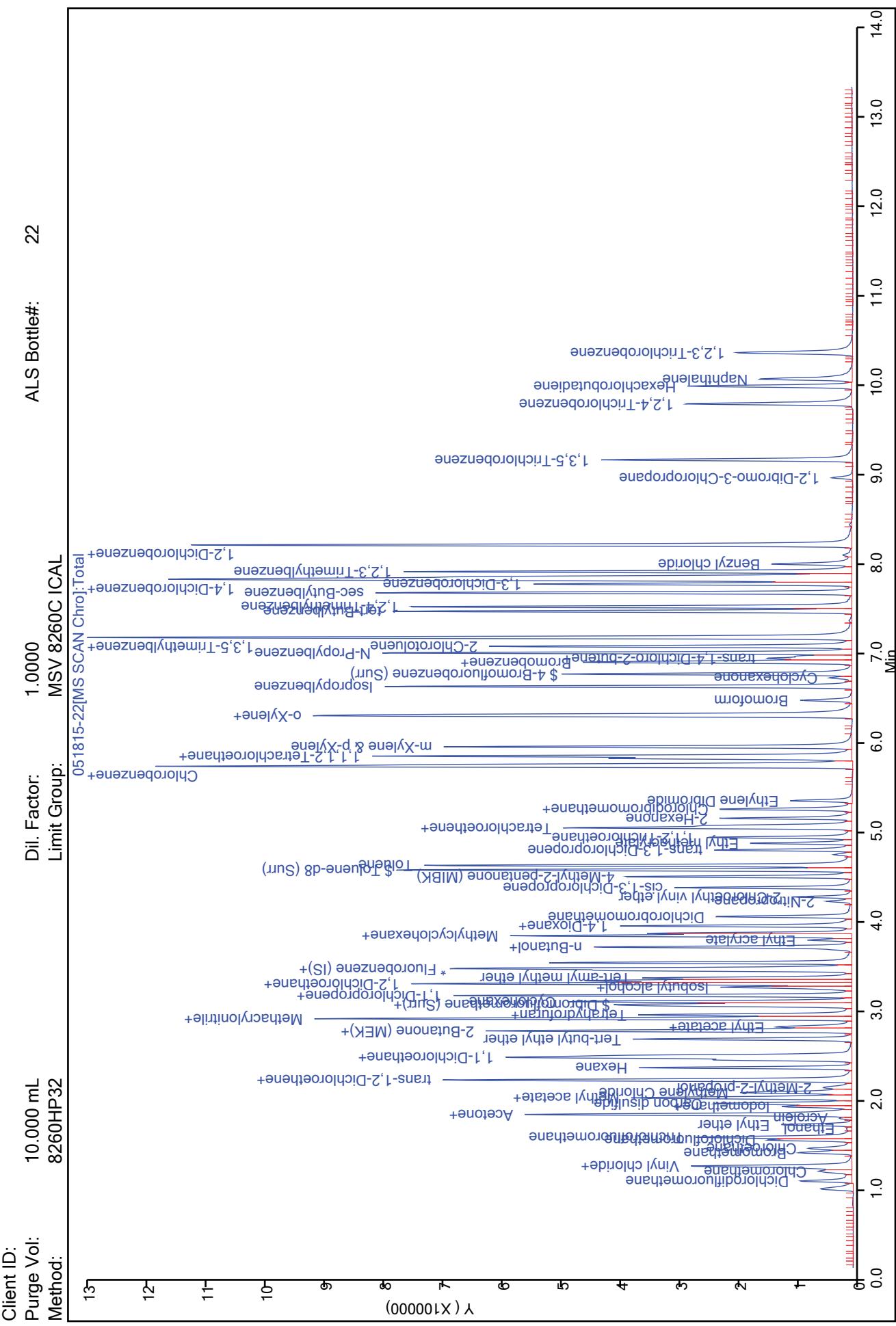
**Reagents:**

V1_gases_I_00104	Amount Added: 20.00	Units: uL	
V1_Mega_I_00036	Amount Added: 20.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:18

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\Nvichrom\\ChromData\\HP32\\20150518-55131.b\\051815-22.D  
18-May-2015 19:24:30  
Instrument ID: HP32  
std020



**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-23.D  
Lims ID: icis  
Client ID:  
Sample Type: ICIS Calib Level: 6  
Inject. Date: 18-May-2015 19:52:30 ALS Bottle#: 23 Worklist Smp#: 7  
Purge Vol: 10.000 mL Dil. Factor: 1.0000  
Sample Info: ICIS  
Misc. Info.: 490-0055131-007  
Operator ID: EML Instrument ID: HP32  
Sublist: chrom-8260HP32\*sub14  
Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
Limit Group: MSV 8260C ICAL  
Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
Last Update: 19-May-2015 11:39:19 Calib Date: 18-May-2015 20:46:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 09:11:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.452	0.000	99	452646	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.711	0.000	84	339327	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	94	194874	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	107910	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	95182	25.0	24.8	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	415029	25.0	24.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	96	142122	25.0	24.7	
9 Dichlorodifluoromethane	85	1.068	1.068	0.000	99	253268	50.0	49.3	
10 Chloromethane	50	1.171	1.171	0.000	98	217720	50.0	49.2	
11 Vinyl chloride	62	1.215	1.215	0.000	98	242829	50.0	47.7	
12 Butadiene	54	1.237	1.237	0.000	89	225390	50.0	49.7	
13 Bromomethane	96	1.384	1.384	0.000	90	176830	50.0	48.0	
14 Chloroethane	64	1.433	1.433	0.000	100	162112	50.0	50.0	
15 Dichlorofluoromethane	67	1.525	1.525	0.000	97	406617	50.0	49.9	
16 Trichlorofluoromethane	101	1.558	1.558	0.000	98	413319	50.0	48.5	
17 Ethanol	45	1.656	1.656	0.000	98	17417	2000.0	2141.2	
18 Ethyl ether	59	1.694	1.694	0.000	88	138888	50.0	48.5	
19 Acrolein	56	1.770	1.770	0.000	99	40877	125.0	122.9	
20 1,1,2-Trichloro-1,2,2-trif	101	1.808	1.808	0.000	93	248134	50.0	48.1	
21 1,1-Dichloroethene	96	1.814	1.814	0.000	97	227659	50.0	48.0	
22 Acetone	58	1.846	1.846	0.000	100	38974	250.0	231.3	
23 Iodomethane	142	1.901	1.901	0.000	98	355598	50.0	52.7	
24 Isopropyl alcohol	45	1.912	1.912	0.000	99	45526	500.0	493.7	
25 Carbon disulfide	76	1.933	1.933	0.000	99	564315	50.0	45.2	
26 Acetonitrile	41	1.993	1.993	0.000	75	389127	500.0	486.6	
27 3-Chloro-1-propene	76	1.993	1.993	0.000	92	224887	NC	NC	
28 Methyl acetate	43	2.004	2.004	0.000	97	388836	250.0	245.3	
30 Methylene Chloride	84	2.059	2.059	0.000	87	231771	50.0	50.3	
31 2-Methyl-2-propanol	59	2.119	2.119	0.000	99	79566	500.0	487.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.189	2.189	0.000	99	379540	500.0	487.1	
34 trans-1,2-Dichloroethene	61	2.200	2.200	0.000	84	305634	50.0	48.6	
33 Methyl tert-butyl ether	73	2.200	2.200	0.000	94	467803	50.0	49.3	
35 Hexane	57	2.336	2.336	0.000	90	319648	50.0	48.5	
36 1,1-Dichloroethane	63	2.423	2.423	0.000	96	410834	50.0	48.4	
37 Vinyl acetate	43	2.451	2.451	0.000	98	801924	100.0	101.3	
38 Isopropyl ether	45	2.456	2.456	0.000	82	617509	50.0	49.9	
39 2-Chloro-1,3-butadiene	53	2.472	2.472	0.000	91	353631	50.0	50.0	
40 Tert-butyl ethyl ether	59	2.657	2.657	0.000	96	559604	50.0	49.1	
42 cis-1,2-Dichloroethene	61	2.750	2.750	0.000	80	355393	50.0	47.2	
41 2,2-Dichloropropane	77	2.750	2.750	0.000	76	359632	50.0	48.9	
43 2-Butanone (MEK)	72	2.766	2.766	0.000	97	65006	250.0	245.2	
44 Ethyl acetate	43	2.788	2.788	0.000	99	198590	100.0	99.2	
45 Propionitrile	54	2.804	2.804	0.000	99	137170	500.0	480.9	
46 Methacrylonitrile	41	2.886	2.886	0.000	91	625734	500.0	485.0	
47 Chlorobromomethane	130	2.892	2.892	0.000	81	156461	50.0	50.2	
48 Tetrahydrofuran	42	2.930	2.930	0.000	75	57612	100.0	95.9	
49 Chloroform	83	2.930	2.930	0.000	92	436251	50.0	50.8	
50 1,1,1-Trichloroethane	97	3.044	3.044	0.000	97	400439	50.0	48.9	
51 Cyclohexane	56	3.077	3.077	0.000	87	399597	50.0	48.3	
53 1,1-Dichloropropene	75	3.142	3.142	0.000	95	340286	50.0	48.9	
54 Carbon tetrachloride	117	3.147	3.147	0.000	96	365321	50.0	50.5	
55 Isobutyl alcohol	43	3.224	3.224	0.000	93	83104	1250.0	1185.9	
56 Benzene	78	3.278	3.278	0.000	96	1008287	50.0	49.1	
57 t-Amyl alcohol	59	3.283	3.283	0.000	73	67816	500.0	474.5	
58 1,2-Dichloroethane	62	3.289	3.289	0.000	98	261665	50.0	48.5	
59 Tert-amyl methyl ether	73	3.343	3.343	0.000	98	502574	50.0	49.6	
60 n-Heptane	43	3.425	3.425	0.000	88	274761	50.0	47.7	
61 n-Butanol	56	3.665	3.665	0.000	85	58191	1250.0	1233.0	
62 Trichloroethene	130	3.692	3.692	0.000	97	295106	50.0	49.1	
63 Ethyl acrylate	55	3.762	3.762	0.000	99	141672	50.0	54.0	
64 Methylcyclohexane	83	3.817	3.817	0.000	86	454116	50.0	49.0	
65 1,2-Dichloropropane	63	3.844	3.844	0.000	94	227301	50.0	48.5	
66 Methyl methacrylate	41	3.920	3.920	0.000	88	203711	100.0	100.2	
67 Dibromomethane	93	3.926	3.926	0.000	90	113052	50.0	48.7	
68 1,4-Dioxane	88	3.958	3.958	0.000	90	16420	1000.0	915.7	
70 Dichlorobromomethane	83	4.029	4.029	0.000	99	309703	50.0	50.3	
71 2-Nitropropane	43	4.198	4.198	0.000	98	59684	100.0	99.6	
72 2-Chloroethyl vinyl ether	63	4.247	4.247	0.000	92	88477	50.0	49.8	
73 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	354719	50.0	51.4	
74 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	209778	250.0	256.1	
75 Toluene	91	4.606	4.606	0.000	98	1124984	50.0	48.8	
76 trans-1,3-Dichloropropene	75	4.775	4.775	0.000	91	275703	50.0	52.3	
77 Ethyl methacrylate	69	4.851	4.851	0.000	86	198355	50.0	50.7	
78 1,1,2-Trichloroethane	97	4.917	4.917	0.000	91	163080	50.0	48.3	
79 Tetrachloroethene	166	5.025	5.025	0.000	98	311694	50.0	48.1	
80 1,3-Dichloropropane	76	5.053	5.053	0.000	88	271429	50.0	48.6	
81 2-Hexanone	58	5.129	5.129	0.000	95	173149	250.0	261.6	
82 Chlorodibromomethane	127	5.232	5.232	0.000	89	153201	50.0	53.0	
83 n-Butyl acetate	43	5.238	5.238	0.000	98	134497	50.0	52.3	
84 Ethylene Dibromide	107	5.330	5.330	0.000	98	153674	50.0	50.9	
85 1-Chlorohexane	91	5.717	5.717	0.000	93	354756	50.0	49.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.738	5.738	0.000	96	718756	50.0	49.2	
87 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	257340	50.0	52.7	
88 Ethylbenzene	91	5.831	5.831	0.000	98	1201549	50.0	52.1	
89 m-Xylene & p-Xylene	91	5.934	5.934	0.000	0	954023	50.0	52.9	
90 o-Xylene	91	6.277	6.277	0.000	96	971781	50.0	54.2	
91 Styrene	104	6.294	6.294	0.000	94	777759	50.0	54.6	
92 Bromoform	173	6.457	6.457	0.000	98	106231	50.0	53.7	
93 Isopropylbenzene	105	6.609	6.609	0.000	95	1218778	50.0	54.2	
94 Cyclohexanone	55	6.702	6.702	0.000	91	35411	500.0	502.6	
95 Bromobenzene	77	6.876	6.876	0.000	90	372230	50.0	48.8	
96 1,1,2,2-Tetrachloroethane	83	6.892	6.892	0.000	94	155472	50.0	48.1	
97 1,2,3-Trichloropropane	110	6.925	6.925	0.000	82	51742	50.0	51.0	
98 trans-1,4-Dichloro-2-butene	53	6.947	6.947	0.000	83	38001	50.0	54.3	
99 N-Propylbenzene	91	6.985	6.985	0.000	98	1390910	50.0	52.8	
100 2-Chlorotoluene	91	7.061	7.061	0.000	98	819987	50.0	50.2	
101 1,3,5-Trimethylbenzene	105	7.159	7.159	0.000	95	1049159	50.0	54.3	
102 4-Chlorotoluene	91	7.159	7.159	0.000	98	975182	50.0	51.9	
103 tert-Butylbenzene	119	7.453	7.453	0.000	92	895719	50.0	53.6	
104 1,2,4-Trimethylbenzene	105	7.502	7.502	0.000	97	1059982	50.0	54.7	
106 sec-Butylbenzene	105	7.660	7.660	0.000	94	1312227	50.0	54.2	
107 1,3-Dichlorobenzene	146	7.758	7.758	0.000	98	579126	50.0	51.8	
108 4-Isopropyltoluene	119	7.807	7.807	0.000	96	1159673	50.0	54.0	
109 1,4-Dichlorobenzene	146	7.845	7.845	0.000	96	594549	50.0	49.1	
110 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	1032607	50.0	52.7	
111 Benzyl chloride	91	7.981	7.981	0.000	98	283914	50.0	48.1	
112 1,2-Dichlorobenzene	146	8.193	8.193	0.000	97	521955	50.0	51.4	
113 n-Butylbenzene	91	8.193	8.193	0.000	97	960314	50.0	56.4	
114 1,2-Dibromo-3-Chloropropan	157	8.950	8.950	0.000	91	31876	50.0	54.2	
115 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	403138	50.0	54.1	
116 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	313437	50.0	54.8	
117 Hexachlorobutadiene	225	9.979	9.979	0.000	97	155299	50.0	50.9	
118 Naphthalene	128	10.055	10.055	0.000	96	493429	50.0	52.0	
119 1,2,3-Trichlorobenzene	180	10.349	10.349	0.000	95	245704	50.0	54.7	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

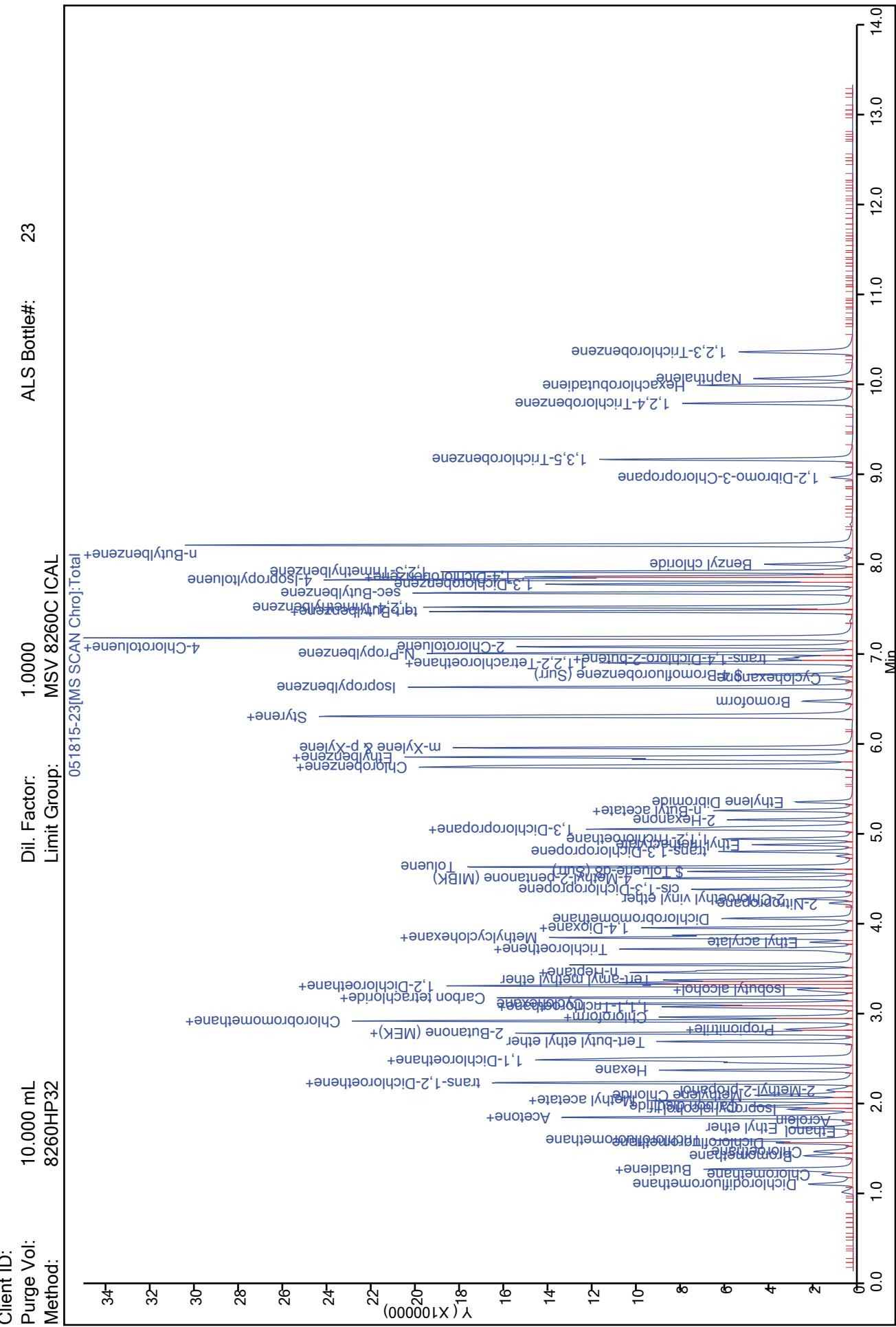
**Reagents:**

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V1_Mega_I_00036	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:21

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\Nv\\chrom\\ChromData\\HP32\\2015\\05\\18-55131.b\\051815-23.D  
Instrument ID: HP32  
18-May-2015 19:52:30  
icis



TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-24.D  
 Lims ID: std100  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 18-May-2015 20:19:30 ALS Bottle#: 24 Worklist Smp#: 8  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: STD100  
 Misc. Info.: 490-0055131-008  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:23 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:37:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.452	-0.004	99	464799	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	358970	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	91	210288	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.028	0.001	94	110961	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.240	0.001	0	96107	25.0	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.552	0.001	92	429528	25.0	24.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.751	0.001	97	153454	25.0	24.7	
9 Dichlorodifluoromethane	85	1.063	1.068	-0.005	99	519376	100.0	98.4	
10 Chloromethane	50	1.178	1.171	0.007	98	437890	100.0	96.5	
11 Vinyl chloride	62	1.216	1.215	0.001	98	506137	100.0	96.8	
12 Butadiene	54	1.238	1.237	0.001	89	471209	100.0	101.2	
13 Bromomethane	96	1.379	1.384	-0.005	90	363089	100.0	96.0	
14 Chloroethane	64	1.428	1.433	-0.005	100	352226	100.0	106.2	
15 Dichlorofluoromethane	67	1.526	1.525	0.001	97	848329	100.0	101.3	
16 Trichlorofluoromethane	101	1.553	1.558	-0.005	98	860891	100.0	98.3	
17 Ethanol	45	1.657	1.656	0.001	98	32004	4000.0	3847.4	
18 Ethyl ether	59	1.695	1.694	0.001	88	296847	100.0	100.9	
19 Acrolein	56	1.766	1.770	-0.004	99	85901	250.0	251.6	
20 1,1,2-Trichloro-1,2,2-trif	101	1.809	1.808	0.001	94	519014	100.0	98.1	
21 1,1-Dichloroethene	96	1.815	1.814	0.001	96	484398	100.0	99.5	
22 Acetone	58	1.847	1.846	0.001	100	84506	500.0	489.7	
23 Iodomethane	142	1.896	1.901	-0.005	98	733796	100.0	105.9	
24 Isopropyl alcohol	45	1.913	1.912	0.001	99	96471	1000.0	1022.2	
25 Carbon disulfide	76	1.934	1.933	0.001	99	997260	100.0	77.8	
26 Acetonitrile	41	1.994	1.993	0.001	75	820327	1000.0	999.0	
27 3-Chloro-1-propene	76	1.994	1.993	0.001	92	602390	NC	NC	
28 Methyl acetate	43	2.005	2.004	0.001	97	832276	500.0	511.2	
30 Methylene Chloride	84	2.060	2.059	0.001	86	484144	100.0	102.8	
31 2-Methyl-2-propanol	59	2.120	2.119	0.001	99	174695	1000.0	1043.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.190	2.189	0.001	100	812451	1000.0	1015.4	
34 trans-1,2-Dichloroethene	61	2.196	2.200	-0.004	97	642793	100.0	99.5	
33 Methyl tert-butyl ether	73	2.201	2.200	0.001	94	998387	100.0	102.4	
35 Hexane	57	2.337	2.336	0.001	89	681882	100.0	100.7	
36 1,1-Dichloroethane	63	2.424	2.423	0.001	96	847776	100.0	97.3	
37 Vinyl acetate	43	2.446	2.451	-0.005	98	1673421	200.0	205.8	
38 Isopropyl ether	45	2.452	2.456	-0.004	82	1295314	100.0	102.0	
39 2-Chloro-1,3-butadiene	53	2.473	2.472	0.001	90	740260	100.0	101.9	
40 Tert-butyl ethyl ether	59	2.658	2.657	0.001	96	1187686	100.0	101.6	
42 cis-1,2-Dichloroethene	61	2.746	2.750	-0.004	80	745100	100.0	96.4	
41 2,2-Dichloropropane	77	2.746	2.750	-0.004	75	756808	100.0	100.3	
43 2-Butanone (MEK)	72	2.762	2.766	-0.004	97	139987	500.0	514.2	
44 Ethyl acetate	43	2.789	2.788	0.001	98	403695	200.0	196.4	
45 Propionitrile	54	2.805	2.804	0.001	99	286395	1000.0	977.8	
46 Methacrylonitrile	41	2.887	2.886	0.001	91	1309592	1000.0	988.5	
47 Chlorobromomethane	130	2.892	2.892	0.000	74	310461	100.0	97.0	
48 Tetrahydrofuran	42	2.931	2.930	0.001	39	118765	200.0	192.6	
49 Chloroform	83	2.931	2.930	0.001	91	894293	100.0	101.9	
50 1,1,1-Trichloroethane	97	3.045	3.044	0.001	97	838346	100.0	99.8	
51 Cyclohexane	56	3.078	3.077	0.001	87	853103	100.0	100.4	
53 1,1-Dichloropropene	75	3.143	3.142	0.001	97	720176	100.0	100.9	
54 Carbon tetrachloride	117	3.148	3.147	0.001	96	763834	100.0	102.9	
55 Isobutyl alcohol	43	3.225	3.224	0.001	94	179291	2500.0	2491.6	
56 Benzene	78	3.279	3.278	0.001	96	2087901	100.0	98.9	
57 t-Amyl alcohol	59	3.284	3.283	0.001	77	146878	1000.0	1000.8	
58 1,2-Dichloroethane	62	3.284	3.289	-0.005	98	536290	100.0	96.9	
59 Tert-amyl methyl ether	73	3.344	3.343	0.001	98	1065589	100.0	102.5	
60 n-Heptane	43	3.426	3.425	0.001	88	598873	100.0	101.2	
61 n-Butanol	56	3.660	3.665	-0.004	86	126448	2500.0	2609.3	
62 Trichloroethene	130	3.687	3.692	-0.005	97	614201	100.0	99.6	
63 Ethyl acrylate	55	3.763	3.762	0.001	99	311282	100.0	115.6	
64 Methylcyclohexane	83	3.818	3.817	0.001	86	960666	100.0	100.8	
65 1,2-Dichloropropane	63	3.845	3.844	0.001	94	472411	100.0	98.2	
66 Methyl methacrylate	41	3.921	3.920	0.001	89	432288	200.0	207.1	
67 Dibromomethane	93	3.927	3.926	0.001	91	237905	100.0	99.9	
68 1,4-Dioxane	88	3.954	3.958	-0.004	89	35873	2000.0	1948.3	
70 Dichlorobromomethane	83	4.030	4.029	0.001	99	652967	100.0	103.4	
71 2-Nitropropane	43	4.199	4.198	0.001	98	135067	200.0	219.5	
72 2-Chloroethyl vinyl ether	63	4.248	4.247	0.001	92	189084	100.0	100.5	
73 cis-1,3-Dichloropropene	75	4.351	4.356	-0.005	97	750977	100.0	102.9	
74 4-Methyl-2-pentanone (MIBK)	58	4.477	4.476	0.001	94	448415	500.0	517.4	
75 Toluene	91	4.602	4.606	-0.004	99	2273385	100.0	93.2	
76 trans-1,3-Dichloropropene	75	4.776	4.775	0.001	91	590381	100.0	105.8	
77 Ethyl methacrylate	69	4.852	4.851	0.001	87	418713	100.0	101.2	
78 1,1,2-Trichloroethane	97	4.917	4.917	0.001	90	340280	100.0	95.4	
79 Tetrachloroethene	166	5.026	5.025	0.001	98	645563	100.0	94.2	
80 1,3-Dichloropropane	76	5.054	5.053	0.001	88	572076	100.0	96.9	
81 2-Hexanone	58	5.130	5.129	0.001	94	379452	500.0	541.8	
82 Chlorodibromomethane	127	5.233	5.232	0.001	90	336219	100.0	110.0	
83 n-Butyl acetate	43	5.233	5.238	-0.005	98	295404	100.0	111.9	
84 Ethylene Dibromide	107	5.326	5.330	-0.004	99	327057	100.0	102.3	
85 1-Chlorohexane	91	5.718	5.717	0.001	93	766905	100.0	104.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.739	5.738	0.001	97	1507287	100.0	97.5	
87 1,1,1,2-Tetrachloroethane	131	5.805	5.804	0.001	95	545480	100.0	105.5	
88 Ethylbenzene	91	5.832	5.831	0.001	98	2513975	100.0	103.0	
89 m-Xylene & p-Xylene	91	5.935	5.934	0.001	0	2000409	100.0	104.8	
90 o-Xylene	91	6.278	6.277	0.001	96	2060796	100.0	108.6	
91 Styrene	104	6.295	6.294	0.001	94	1682822	100.0	111.6	
92 Bromoform	173	6.453	6.457	-0.005	98	242044	100.0	115.7	
93 Isopropylbenzene	105	6.610	6.609	0.001	96	2583842	100.0	108.6	
94 Cyclohexanone	55	6.703	6.702	0.001	91	107635	1000.0	1486.3	
95 Bromobenzene	77	6.877	6.876	0.001	88	819711	100.0	99.5	
96 1,1,2,2-Tetrachloroethane	83	6.893	6.892	0.001	94	340641	100.0	97.6	
97 1,2,3-Trichloropropane	110	6.926	6.925	0.001	82	111527	100.0	101.8	
98 trans-1,4-Dichloro-2-butene	53	6.948	6.947	0.001	83	84820	100.0	112.4	
99 N-Propylbenzene	91	6.991	6.985	0.006	98	2932429	100.0	103.1	
100 2-Chlorotoluene	91	7.062	7.061	0.001	98	1749639	100.0	99.2	
101 1,3,5-Trimethylbenzene	105	7.160	7.159	0.001	95	2237216	100.0	107.3	
102 4-Chlorotoluene	91	7.160	7.159	0.001	98	2100200	100.0	103.5	
103 tert-Butylbenzene	119	7.454	7.453	0.001	92	1921155	100.0	106.5	
104 1,2,4-Trimethylbenzene	105	7.503	7.502	0.001	97	2245990	100.0	107.4	
106 sec-Butylbenzene	105	7.666	7.660	0.006	94	2785210	100.0	106.6	
107 1,3-Dichlorobenzene	146	7.759	7.758	0.001	98	1240645	100.0	102.9	
108 4-Isopropyltoluene	119	7.808	7.807	0.001	96	2483708	100.0	107.1	
109 1,4-Dichlorobenzene	146	7.846	7.845	0.001	95	1269170	100.0	97.2	
110 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	2193651	100.0	103.7	
111 Benzyl chloride	91	7.982	7.981	0.001	98	639588	100.0	101.9	
112 1,2-Dichlorobenzene	146	8.194	8.193	0.001	98	1114017	100.0	101.7	
113 n-Butylbenzene	91	8.200	8.193	0.007	97	2073586	100.0	112.8	
114 1,2-Dibromo-3-Chloropropan	157	8.946	8.950	-0.004	93	72980	100.0	115.0	
115 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	879732	100.0	109.5	
116 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	674714	100.0	109.4	
117 Hexachlorobutadiene	225	9.980	9.979	0.001	97	342129	100.0	103.9	
118 Naphthalene	128	10.051	10.055	-0.004	96	1107930	100.0	107.7	
119 1,2,3-Trichlorobenzene	180	10.350	10.349	0.001	96	547033	100.0	112.9	
S 135 Xylenes, Total	1				0			213.4	
S 136 1,3-Dichloropropene, Total	1				0			208.7	
S 132 1,2-Dichloroethene, Total	1				0			195.9	
S 133 Trihalomethanes, Total	1				0			431.0	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

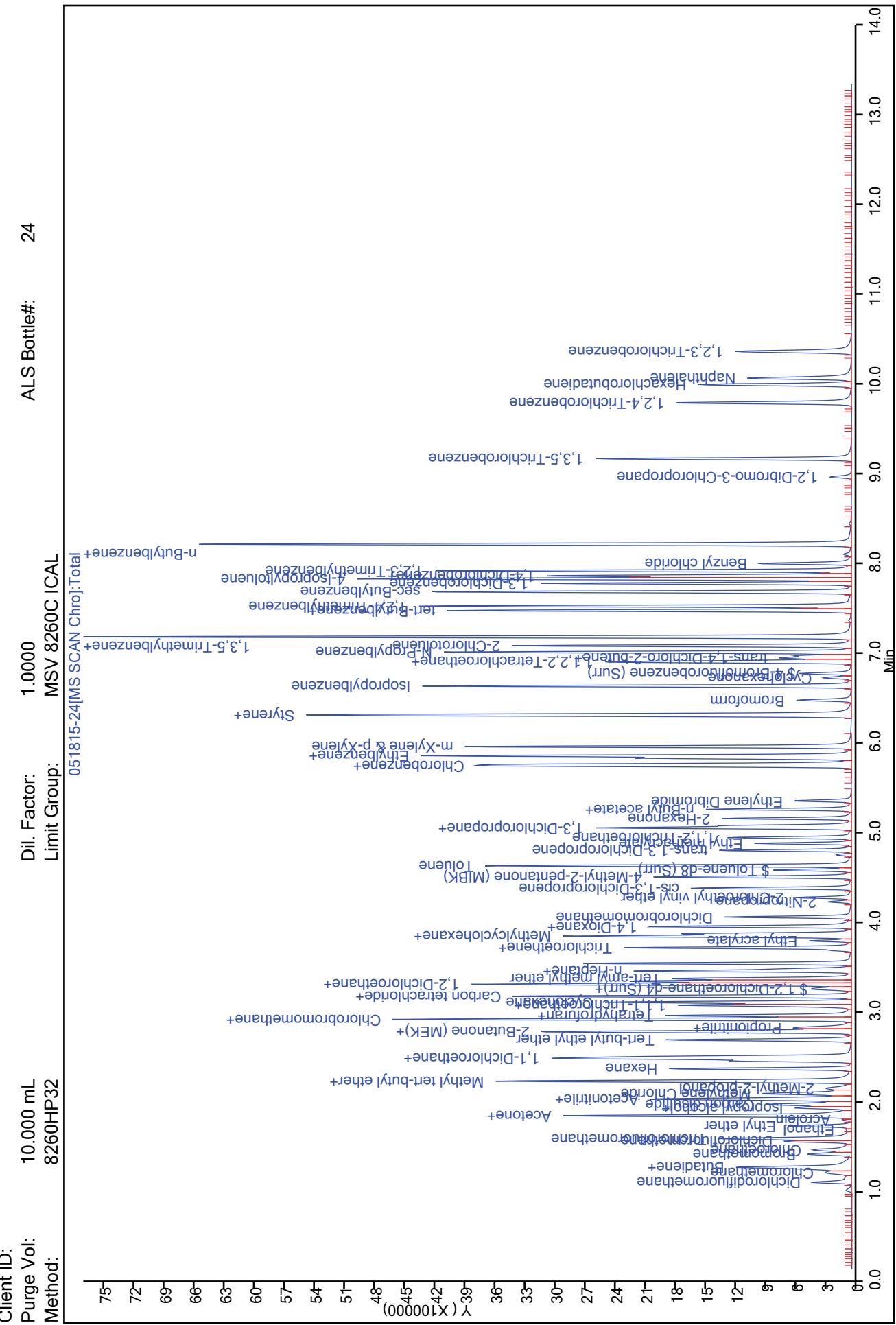
**Reagents:**

V1_gases_I_00104	Amount Added: 100.00	Units: uL	
V1_Mega_I_00036	Amount Added: 100.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:24

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\Nvichrom\ChromData\HP32\20150518-55131.b\051815-24.D  
18-May-2015 20:19:30  
Instrument ID: HP32  
std100



**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D  
Lims ID: std200  
Client ID:  
Sample Type: IC Calib Level: 8  
Inject. Date: 18-May-2015 20:46:30 ALS Bottle#: 25 Worklist Smp#: 9  
Purge Vol: 10.000 mL Dil. Factor: 1.0000  
Sample Info: STD200  
Misc. Info.: 490-0055131-009  
Operator ID: EML Instrument ID: HP32  
Sublist: chrom-8260HP32\*sub14  
Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
Limit Group: MSV 8260C ICAL  
Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
Last Update: 19-May-2015 11:39:26 Calib Date: 18-May-2015 20:46:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D  
Column 1 : Det: MS SCAN  
Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:25:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.452	-0.004	99	487825	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	85	383818	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	93	220436	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	114586	25.0	24.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.240	0.001	0	98259	25.0	23.7	
\$ 6 Toluene-d8 (Surr)	98	4.558	4.552	0.006	92	445249	25.0	23.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.751	0.001	96	161503	25.0	24.8	
9 Dichlorodifluoromethane	85	1.063	1.068	-0.005	99	1037459	200.0	187.2	
10 Chloromethane	50	1.172	1.171	0.001	99	942284	200.0	198.1	
11 Vinyl chloride	62	1.216	1.215	0.001	98	1049448	200.0	191.2	
12 Butadiene	54	1.232	1.237	-0.005	88	936067	200.0	191.5	
13 Bromomethane	96	1.374	1.384	-0.010	93	532041	200.0	134.0	
14 Chloroethane	64	1.423	1.433	-0.010	100	697561	200.0	200.6	
15 Dichlorofluoromethane	67	1.521	1.525	-0.004	97	1743237	200.0	198.4	
16 Trichlorofluoromethane	101	1.553	1.558	-0.005	98	1668751	200.0	181.5	
18 Ethyl ether	59	1.695	1.694	0.001	88	616475	200.0	199.7	
19 Acrolein	56	1.766	1.770	-0.004	98	182672	500.0	509.7	
20 1,1,2-Trichloro-1,2,2-trif	101	1.804	1.808	-0.004	95	1105566	200.0	199.0	
21 1,1-Dichloroethene	96	1.809	1.814	-0.005	96	987018	200.0	193.2	
22 Acetone	58	1.847	1.846	0.001	100	184995	1000.0	1022.6	
23 Iodomethane	142	1.896	1.901	-0.005	98	1441538	200.0	198.3	
24 Isopropyl alcohol	45	1.918	1.912	0.006	99	196070	2000.0	1982.5	
25 Carbon disulfide	76	1.934	1.933	0.001	100	1975519	200.0	146.8	
26 Acetonitrile	41	1.989	1.993	-0.004	80	1625111	2000.0	1885.6	
27 3-Chloro-1-propene	76	1.989	1.993	-0.004	93	1400895	NC	NC	
28 Methyl acetate	43	2.000	2.004	-0.004	96	1652726	1000.0	967.3	
30 Methylene Chloride	84	2.054	2.059	-0.005	86	1000516	200.0	202.7	
31 2-Methyl-2-propanol	59	2.119	2.119	0.000	100	368168	2000.0	2094.3	
32 Acrylonitrile	53	2.190	2.189	0.001	99	1669561	2000.0	1988.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.196	2.200	-0.004	99	1302945	200.0	192.2	
33 Methyl tert-butyl ether	73	2.201	2.200	0.001	94	2001902	200.0	195.7	
35 Hexane	57	2.332	2.336	-0.004	89	1398890	200.0	196.9	
36 1,1-Dichloroethane	63	2.424	2.423	0.001	95	1725118	200.0	188.6	
37 Vinyl acetate	43	2.446	2.451	-0.005	97	3271229	400.0	383.2	
38 Isopropyl ether	45	2.451	2.456	-0.005	82	2553663	200.0	191.6	
39 2-Chloro-1,3-butadiene	53	2.473	2.472	0.001	91	1469444	200.0	192.6	
40 Tert-butyl ethyl ether	59	2.658	2.657	0.001	96	2391843	200.0	194.9	
42 cis-1,2-Dichloroethene	61	2.745	2.750	-0.005	80	1492501	200.0	184.0	
41 2,2-Dichloropropane	77	2.745	2.750	-0.005	75	1507587	200.0	190.3	
43 2-Butanone (MEK)	72	2.767	2.766	0.001	99	287803	1000.0	1007.3	
44 Ethyl acetate	43	2.789	2.788	0.001	98	842146	400.0	390.4	
45 Propionitrile	54	2.805	2.804	0.001	99	605970	2000.0	1971.2	
46 Methacrylonitrile	41	2.892	2.886	0.006	88	2611874	2000.0	1878.5	
47 Chlorobromomethane	130	2.892	2.892	0.000	77	591810	200.0	176.2	
48 Tetrahydrofuran	42	2.930	2.930	0.000	80	241829	400.0	373.6	
49 Chloroform	83	2.930	2.930	0.000	93	1756751	200.0	191.1	
50 1,1,1-Trichloroethane	97	3.045	3.044	0.001	97	1655120	200.0	187.7	
51 Cyclohexane	56	3.077	3.077	0.000	87	1706437	200.0	191.4	
53 1,1-Dichloropropene	75	3.143	3.142	0.001	98	1428953	200.0	190.7	
54 Carbon tetrachloride	117	3.148	3.147	0.001	96	1493752	200.0	191.7	
55 Isobutyl alcohol	43	3.224	3.224	0.000	94	383634	5000.0	5079.7	
56 Benzene	78	3.273	3.278	-0.005	96	3998742	200.0	180.5	
57 t-Amyl alcohol	59	3.284	3.283	0.001	54	309831	2000.0	2011.5	
58 1,2-Dichloroethane	62	3.290	3.289	0.001	98	1070744	200.0	184.3	
59 Tert-amyl methyl ether	73	3.344	3.343	0.001	98	2141272	200.0	196.3	
60 n-Heptane	43	3.426	3.425	0.001	87	1227184	200.0	197.6	
61 n-Butanol	56	3.665	3.665	0.001	85	270462	5000.0	5317.7	
62 Trichloroethene	130	3.687	3.692	-0.005	97	1221569	200.0	188.7	
63 Ethyl acrylate	55	3.763	3.762	0.001	99	640395	200.0	226.5	
64 Methylcyclohexane	83	3.818	3.817	0.001	88	1910734	200.0	191.1	
65 1,2-Dichloropropane	63	3.845	3.844	0.001	95	950205	200.0	188.3	
66 Methyl methacrylate	41	3.921	3.920	0.001	89	876463	400.0	400.0	
67 Dibromomethane	93	3.927	3.926	0.001	90	472336	200.0	188.9	
68 1,4-Dioxane	88	3.959	3.958	0.001	88	98333	4000.0	5088.5	
70 Dichlorobromomethane	83	4.030	4.029	0.001	99	1305999	200.0	197.0	
71 2-Nitropropane	43	4.199	4.198	0.001	97	284678	400.0	440.8	
72 2-Chloroethyl vinyl ether	63	4.248	4.247	0.001	92	391036	200.0	194.4	
73 cis-1,3-Dichloropropene	75	4.357	4.356	0.001	97	1510713	200.0	193.6	
74 4-Methyl-2-pentanone (MIBK)	58	4.482	4.476	0.006	94	877480	1000.0	947.0	
75 Toluene	91	4.607	4.606	0.001	99	4284392	200.0	164.3	
76 trans-1,3-Dichloropropene	75	4.776	4.775	0.001	91	1198029	200.0	200.8	
77 Ethyl methacrylate	69	4.852	4.851	0.001	87	843829	200.0	190.8	
78 1,1,2-Trichloroethane	97	4.923	4.917	0.007	90	675651	200.0	177.1	
79 Tetrachloroethene	166	5.032	5.025	0.007	97	1269176	200.0	173.2	
80 1,3-Dichloropropane	76	5.053	5.053	0.000	87	1172583	200.0	185.7	
81 2-Hexanone	58	5.135	5.129	0.006	93	779375	1000.0	1040.9	
82 Chlorodibromomethane	127	5.233	5.232	0.001	90	715029	200.0	218.8	
83 n-Butyl acetate	43	5.233	5.238	-0.005	96	617027	200.0	222.7	
84 Ethylene Dibromide	107	5.331	5.330	0.001	99	678284	200.0	198.4	
85 1-Chlorohexane	91	5.723	5.717	0.006	94	1617902	200.0	209.8	
86 Chlorobenzene	112	5.739	5.738	0.001	95	3092824	200.0	187.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 1,1,1,2-Tetrachloroethane	131	5.810	5.804	0.006	95	1147970	200.0	207.7	
88 Ethylbenzene	91	5.837	5.831	0.006	97	4976982	200.0	190.7	
89 m-Xylene & p-Xylene	91	5.935	5.934	0.001	0	4078405	200.0	199.8	
90 o-Xylene	91	6.284	6.277	0.007	96	4178854	200.0	206.1	
91 Styrene	104	6.300	6.294	0.006	94	3359668	200.0	208.4	
92 Bromoform	173	6.452	6.457	-0.005	98	516098	200.0	230.8	
93 Isopropylbenzene	105	6.616	6.609	0.007	96	5084035	200.0	199.9	
94 Cyclohexanone	55	6.703	6.702	0.001	90	228616	2000.0	3007.2	
95 Bromobenzene	77	6.877	6.876	0.001	92	1713564	200.0	198.5	
96 1,1,2,2-Tetrachloroethane	83	6.893	6.892	0.001	96	702416	200.0	192.0	
97 1,2,3-Trichloropropane	110	6.931	6.925	0.006	82	225332	200.0	196.2	
98 trans-1,4-Dichloro-2-butene	53	6.953	6.947	0.006	93	181746	200.0	229.8	
99 N-Propylbenzene	91	6.997	6.985	0.012	97	5713589	200.0	191.6	
100 2-Chlorotoluene	91	7.067	7.061	0.006	98	3521368	200.0	190.5	
101 1,3,5-Trimethylbenzene	105	7.160	7.159	0.001	95	4362464	200.0	199.6	
102 4-Chlorotoluene	91	7.165	7.159	0.006	98	4129584	200.0	194.2	
103 tert-Butylbenzene	119	7.459	7.453	0.006	92	3871685	200.0	204.8	
104 1,2,4-Trimethylbenzene	105	7.508	7.502	0.006	97	4445231	200.0	202.8	
106 sec-Butylbenzene	105	7.666	7.660	0.006	95	5402639	200.0	197.2	
107 1,3-Dichlorobenzene	146	7.764	7.758	0.006	98	2544940	200.0	201.3	
108 4-Isopropyltoluene	119	7.813	7.807	0.006	95	4848884	200.0	199.5	
109 1,4-Dichlorobenzene	146	7.846	7.845	0.001	95	2553523	200.0	186.6	
110 1,2,3-Trimethylbenzene	105	7.906	7.900	0.006	97	4307641	200.0	194.3	
111 Benzyl chloride	91	7.982	7.981	0.001	98	1378987	200.0	205.1	
112 1,2-Dichlorobenzene	146	8.194	8.193	0.001	97	2211756	200.0	192.5	
113 n-Butylbenzene	91	8.200	8.193	0.007	96	4115124	200.0	213.6	
114 1,2-Dibromo-3-Chloropropan	157	8.945	8.950	-0.005	93	154048	200.0	231.6	
115 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	1841714	200.0	218.7	
116 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	1446301	200.0	223.7	
117 Hexachlorobutadiene	225	9.980	9.979	0.001	97	744614	200.0	215.7	
118 Naphthalene	128	10.050	10.055	-0.005	97	2280260	200.0	210.9	
119 1,2,3-Trichlorobenzene	180	10.350	10.349	0.001	96	1102157	200.0	217.0	
S 135 Xylenes, Total	1				0			405.8	
S 136 1,3-Dichloropropene, Total	1				0			394.3	
S 132 1,2-Dichloroethene, Total	1				0			376.2	
S 133 Trihalomethanes, Total	1				0			837.7	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

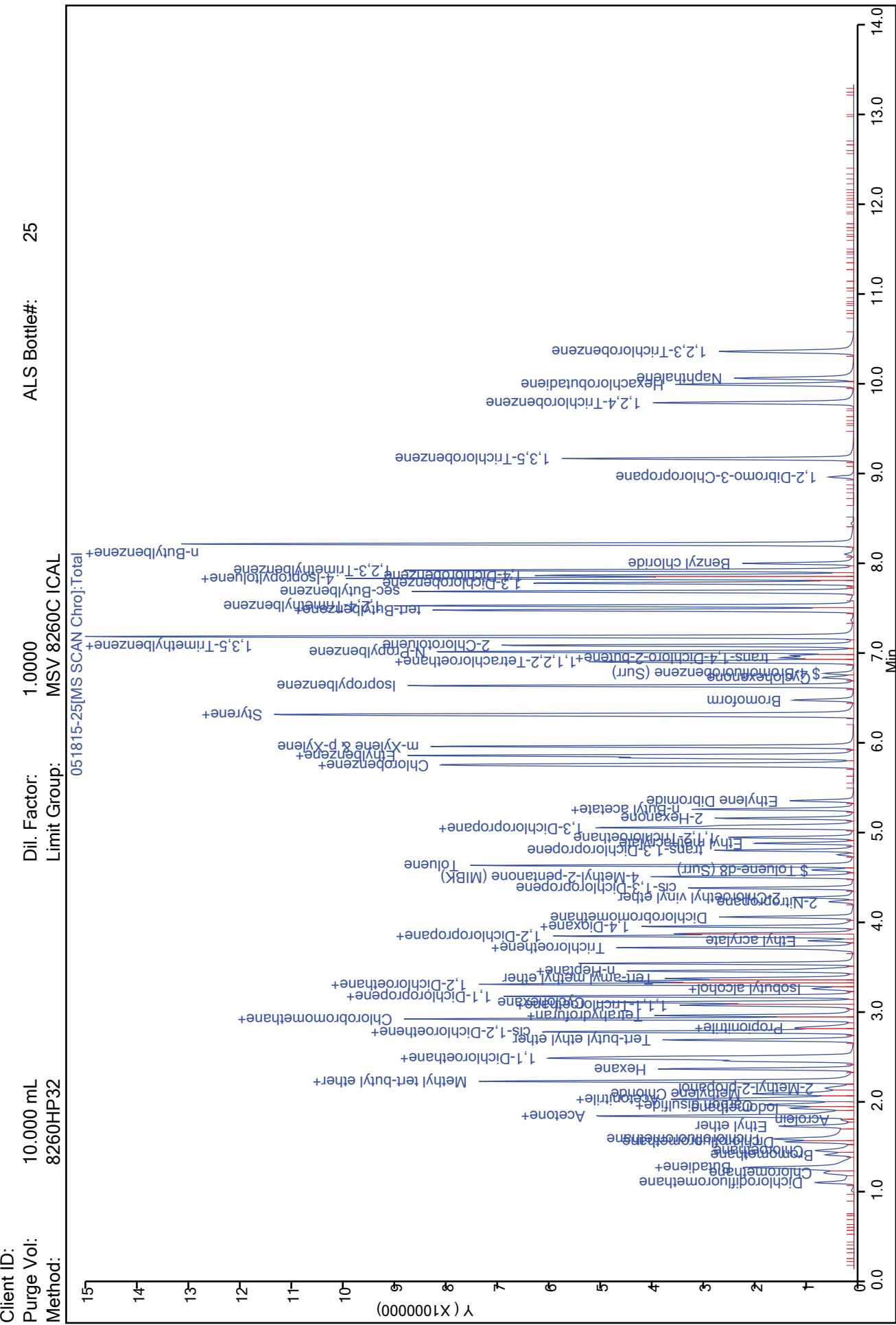
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V1\_Mega\_I\_00036  
VOA\_ISSS\_50\_W\_00026

Amount Added: 200.00 Units: uL  
Amount Added: 200.00 Units: uL  
Amount Added: 5.00 Units: uL Run Reagent

Report Date: 19-May-2015 11:39:27

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\NvIchrom\ChromData\HP32\20150518-55131.b\051815-25.D  
18-May-2015 20:46:30  
Instrument ID: HP32  
std200



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 490-249241/12 Calibration Date: 05/18/2015 22:07  
Instrument ID: HP32 Calib Start Date: 03/13/2015 11:26  
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/13/2015 14:31  
Lab File ID: 051815-28.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3-Chloro-1-propene	Ave	0.1558	0.2301	0.1000		50.0	47.7*	30.0

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-28.D  
 Lims ID: icv  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 18-May-2015 22:07:30 ALS Bottle#: 28 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ICV  
 Misc. Info.: 490-0055131-012  
 Operator ID: EML Instrument ID: HP32  
 Sublist:  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:26 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:41:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.453	3.452	0.001	99	463764	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	346893	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	94	200683	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	109357	25.0	24.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	96440	25.0	24.5	
\$ 6 Toluene-d8 (Surr)	98	4.558	4.552	0.006	92	425128	25.0	24.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	96	149420	25.0	25.2	
9 Dichlorodifluoromethane	85	1.063	1.068	-0.005	99	281160	50.0	53.4	
10 Chloromethane	50	1.172	1.171	0.001	98	214804	50.0	47.3	
11 Vinyl chloride	62	1.215	1.215	0.000	98	236431	50.0	45.3	
12 Butadiene	54	1.232	1.237	-0.005	89	214993	50.0	46.3	
13 Bromomethane	96	1.384	1.384	0.000	91	169800	50.0	45.0	
14 Chloroethane	64	1.433	1.433	0.000	100	158873	50.0	47.8	
15 Dichlorofluoromethane	67	1.526	1.525	0.001	97	401117	50.0	48.0	
16 Trichlorofluoromethane	101	1.558	1.558	0.000	98	404341	50.0	46.3	
17 Ethanol	45	1.656	1.656	0.000	90	17800	2500.0	2135.7	
18 Ethyl ether	59	1.695	1.694	0.000	88	138192	50.0	47.1	
19 Acrolein	56	1.771	1.770	0.001	98	41942	125.0	123.1	
20 1,1,2-Trichloro-1,2,2-trif	101	1.809	1.808	0.001	94	248090	50.0	47.0	
21 1,1-Dichloroethene	96	1.814	1.814	0.000	97	222396	50.0	45.8	
22 Acetone	58	1.847	1.846	0.001	100	41124	250.0	238.3	
23 Iodomethane	142	1.901	1.901	0.000	98	371736	50.0	53.8	
24 Isopropyl alcohol	45	1.912	1.912	0.000	100	42575	500.0	450.4	
25 Carbon disulfide	76	1.934	1.933	0.001	99	558000	50.0	43.6	
26 Acetonitrile	41	1.994	1.993	0.001	74	378028	500.0	461.4	
27 3-Chloro-1-propene	76	1.994	1.993	0.001	92	213388	NC	NC	
28 Methyl acetate	43	2.005	2.004	0.001	97	420367	250.0	258.8	
30 Methylene Chloride	84	2.059	2.059	0.000	87	232633	50.0	49.3	
31 2-Methyl-2-propanol	59	2.114	2.119	-0.005	99	80292	500.0	480.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.190	2.189	0.001	99	389323	500.0	487.7	
34 trans-1,2-Dichloroethene	61	2.201	2.200	0.001	82	312923	50.0	48.6	
33 Methyl tert-butyl ether	73	2.201	2.200	0.001	94	479522	50.0	49.3	
35 Hexane	57	2.337	2.336	0.001	90	325909	50.0	48.3	
36 1,1-Dichloroethane	63	2.424	2.423	0.001	96	416941	50.0	47.9	
37 Vinyl acetate	43	2.451	2.451	0.000	97	803618	100.0	99.0	
38 Isopropyl ether	45	2.451	2.456	-0.005	82	628471	50.0	49.6	
39 2-Chloro-1,3-butadiene	53	2.473	2.472	0.001	91	363345	50.0	50.1	
40 Tert-butyl ethyl ether	59	2.658	2.657	0.001	96	559835	50.0	48.0	
42 cis-1,2-Dichloroethene	61	2.751	2.750	0.001	80	368195	50.0	47.8	
41 2,2-Dichloropropane	77	2.751	2.750	0.001	75	355689	50.0	47.2	
43 2-Butanone (MEK)	72	2.767	2.766	0.001	100	68266	250.0	251.3	
44 Ethyl acetate	43	2.789	2.788	0.001	99	163797	100.0	79.9	
45 Propionitrile	54	2.800	2.804	-0.004	99	137492	500.0	470.5	
46 Methacrylonitrile	41	2.887	2.886	0.001	90	639097	500.0	483.5	
47 Chlorobromomethane	130	2.892	2.892	0.000	79	157925	50.0	49.5	
48 Tetrahydrofuran	42	2.930	2.930	0.000	75	56531	100.0	91.9	
49 Chloroform	83	2.930	2.930	0.000	93	446014	50.0	50.7	
50 1,1,1-Trichloroethane	97	3.044	3.044	0.000	98	408570	50.0	48.7	
51 Cyclohexane	56	3.077	3.077	0.000	88	403966	50.0	47.7	
53 1,1-Dichloropropene	75	3.148	3.142	0.006	97	346476	50.0	48.6	
54 Carbon tetrachloride	117	3.148	3.147	0.001	96	374780	50.0	50.6	
55 Isobutyl alcohol	43	3.224	3.224	0.000	95	82923	1250.0	1154.9	
56 Benzene	78	3.279	3.278	0.001	95	1018403	50.0	48.4	
57 t-Amyl alcohol	59	3.284	3.283	0.001	67	64956	500.0	443.6	
58 1,2-Dichloroethane	62	3.289	3.289	0.000	98	259659	50.0	47.0	
59 Tert-amyl methyl ether	73	3.344	3.343	0.001	98	507321	50.0	48.9	
60 n-Heptane	43	3.426	3.425	0.001	89	292822	50.0	49.6	
61 n-Butanol	56	3.660	3.665	-0.004	87	55273	1250.0	1143.1	
62 Trichloroethene	130	3.692	3.692	0.000	97	306930	50.0	49.9	
63 Ethyl acrylate	55	3.763	3.762	0.001	99	139887	50.0	52.1	
64 Methylcyclohexane	83	3.817	3.817	0.000	86	459974	50.0	48.4	
65 1,2-Dichloropropane	63	3.845	3.844	0.001	94	232974	50.0	48.6	
66 Methyl methacrylate	41	3.921	3.920	0.001	87	211840	100.0	101.7	
67 Dibromomethane	93	3.926	3.926	0.000	93	113940	50.0	47.9	
68 1,4-Dioxane	88	3.954	3.958	-0.004	94	15868	1000.0	863.7	
70 Dichlorobromomethane	83	4.030	4.029	0.001	99	318025	50.0	50.5	
71 2-Nitropropane	43	4.204	4.198	0.006	97	58999	100.0	96.1	
72 2-Chloroethyl vinyl ether	63	4.248	4.247	0.001	92	92593	50.0	50.9	
73 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	361032	50.0	51.2	
74 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	214283	250.0	255.9	
75 Toluene	91	4.607	4.606	0.001	99	1140650	50.0	48.4	
76 trans-1,3-Dichloropropene	75	4.776	4.775	0.001	91	291416	50.0	54.0	
77 Ethyl methacrylate	69	4.852	4.851	0.001	87	199101	50.0	49.8	
78 1,1,2-Trichloroethane	97	4.917	4.917	0.001	90	165660	50.0	48.0	
79 Tetrachloroethene	166	5.026	5.025	0.001	98	316119	50.0	47.7	
80 1,3-Dichloropropane	76	5.053	5.053	0.000	88	277539	50.0	48.6	
81 2-Hexanone	58	5.129	5.129	0.000	94	180136	250.0	266.2	
82 Chlorodibromomethane	127	5.233	5.232	0.001	89	157324	50.0	53.3	
83 n-Butyl acetate	43	5.238	5.238	0.000	98	107647	50.0	40.9	
84 Ethylene Dibromide	107	5.331	5.330	0.001	99	155929	50.0	50.5	
85 1-Chlorohexane	91	5.717	5.717	0.000	94	358402	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.739	5.738	0.001	96	728113	50.0	48.8	
87 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	259506	50.0	51.9	
88 Ethylbenzene	91	5.832	5.831	0.001	97	1210842	50.0	51.3	
89 m-Xylene & p-Xylene	91	5.935	5.934	0.001	0	959455	50.0	52.0	
90 o-Xylene	91	6.278	6.277	0.001	96	979163	50.0	53.4	
91 Styrene	104	6.294	6.294	0.000	94	782832	50.0	53.7	
92 Bromoform	173	6.458	6.457	0.001	98	118353	50.0	58.6	
93 Isopropylbenzene	105	6.610	6.609	0.001	95	1267695	50.0	55.2	
94 Cyclohexanone	55	6.708	6.702	0.006	91	24506	500.0	339.7	
95 Bromobenzene	77	6.877	6.876	0.001	90	383231	50.0	48.8	
96 1,1,2,2-Tetrachloroethane	83	6.893	6.892	0.001	94	162634	50.0	48.8	
97 1,2,3-Trichloropropane	110	6.926	6.925	0.001	81	54709	50.0	52.3	
98 trans-1,4-Dichloro-2-butene	53	6.953	6.947	0.006	92	42918	50.0	59.6	
99 N-Propylbenzene	91	6.986	6.985	0.001	98	1437382	50.0	53.0	
100 2-Chlorotoluene	91	7.062	7.061	0.001	97	843980	50.0	50.2	
101 1,3,5-Trimethylbenzene	105	7.160	7.159	0.001	95	1081401	50.0	54.3	
102 4-Chlorotoluene	91	7.160	7.159	0.001	98	1007773	50.0	52.1	
103 tert-Butylbenzene	119	7.454	7.453	0.001	92	924375	50.0	53.7	
104 1,2,4-Trimethylbenzene	105	7.503	7.502	0.001	97	1084305	50.0	54.3	
106 sec-Butylbenzene	105	7.661	7.660	0.001	94	1356049	50.0	54.4	
107 1,3-Dichlorobenzene	146	7.759	7.758	0.001	98	598390	50.0	52.0	
108 4-Isopropyltoluene	119	7.808	7.807	0.001	97	1182524	50.0	53.4	
109 1,4-Dichlorobenzene	146	7.846	7.845	0.001	96	613017	50.0	49.2	
110 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	1035577	50.0	51.3	
111 Benzyl chloride	91	7.982	7.981	0.001	98	292787	50.0	48.5	
112 1,2-Dichlorobenzene	146	8.194	8.193	0.001	97	539849	50.0	51.6	
113 n-Butylbenzene	91	8.199	8.193	0.006	97	985140	50.0	56.2	
114 1,2-Dibromo-3-Chloropropan	157	8.951	8.950	0.001	92	33877	50.0	55.9	
115 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	412617	50.0	53.8	
116 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	326038	50.0	55.4	
117 Hexachlorobutadiene	225	9.979	9.979	0.000	96	163238	50.0	52.0	
118 Naphthalene	128	10.050	10.055	-0.005	96	513100	50.0	52.5	
119 1,2,3-Trichlorobenzene	180	10.350	10.349	0.001	95	251142	50.0	54.3	
S 135 Xylenes, Total	1				0		100.0	105.4	
S 136 1,3-Dichloropropene, Total	1				0		100.0	105.2	
S 132 1,2-Dichloroethene, Total	1				0		100.0	96.3	
S 133 Trihalomethanes, Total	1				0		200.0	213.0	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

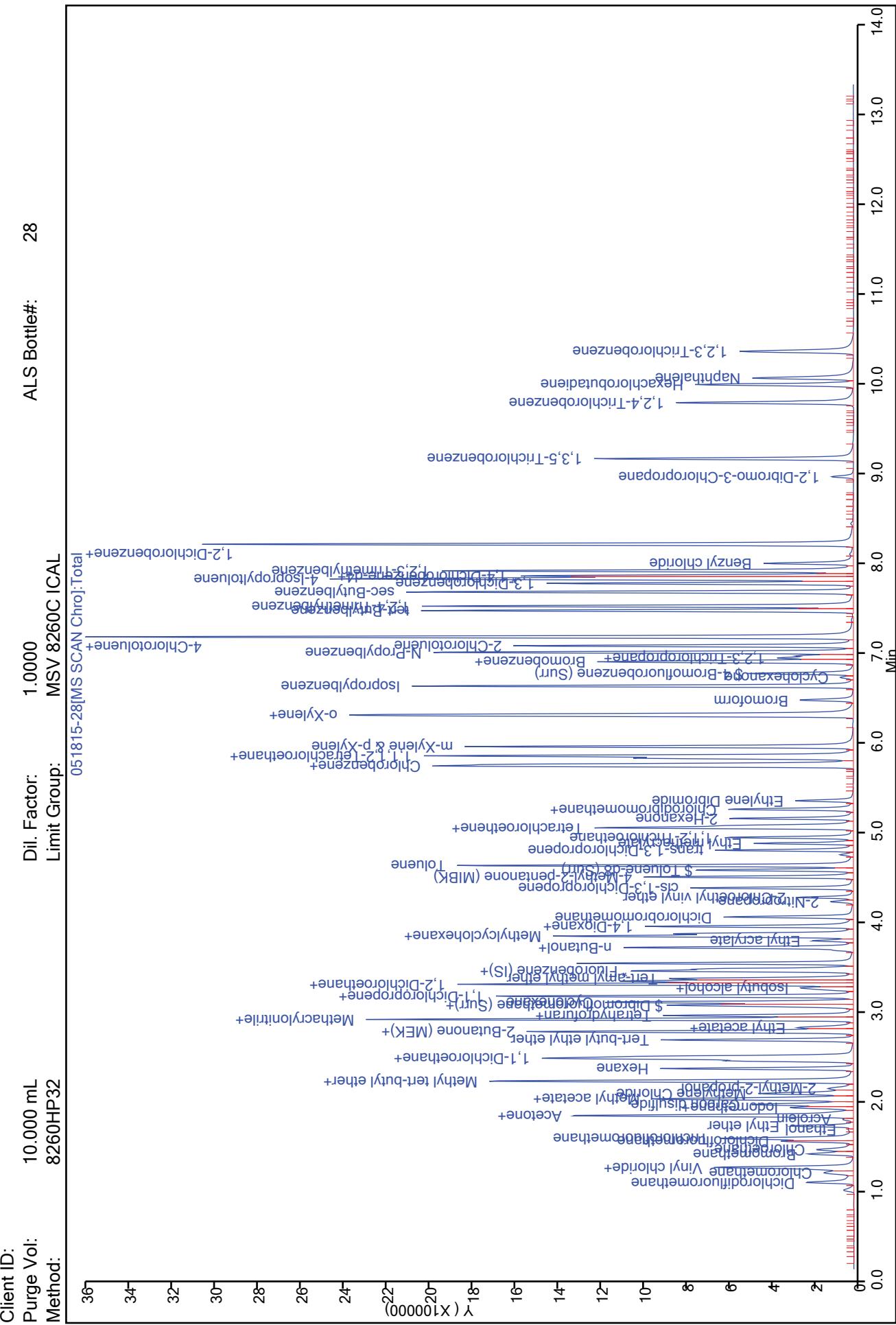
**Reagents:**

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V2_gases_I_00078	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:30

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\NV\\chrom\\ChromData\\HP32\\2015\\05\\18-55131.b\\051815-28.D  
18-May-2015 22:07:30      Instrument ID: HP32  
icv



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: ICV 490-249241/12

Calibration Date: 05/18/2015 22:07

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 051815-28.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2840	0.3031	0.1000	53.4	50.0	6.7	30.0
Chloromethane	Lin2		0.2316	0.1000	47.3	50.0	-5.3	30.0
Vinyl chloride	Ave	0.2813	0.2549	0.1000	45.3	50.0	-9.4	30.0
Butadiene	Ave	0.2505	0.2318	0.1000	46.3	50.0	-7.5	30.0
Bromomethane	Ave	0.2034	0.1831	0.1000	45.0	50.0	-10.0	30.0
Chloroethane	Lin2		0.1713	0.1000	47.8	50.0	-4.3	30.0
Dichlorofluoromethane	Ave	0.4503	0.4325	0.1000	48.0	50.0	-4.0	30.0
Trichlorofluoromethane	Ave	0.4711	0.4359	0.1000	46.3	50.0	-7.5	30.0
Ethanol	Lin2	0.0006	0.0004*	0.0010	2140	2500	-14.6	40.0
Ethyl ether	Ave	0.1582	0.1490	0.1000	47.1	50.0	-5.8	30.0
Acrolein	Ave	0.0184	0.0181	0.0100	123	125	-1.5	40.0
Freon-113	Ave	0.2847	0.2675	0.1000	47.0	50.0	-6.0	30.0
1,1-Dichloroethene	Ave	0.2618	0.2398	0.1000	45.8	50.0	-8.4	30.0
Acetone	Lin2		0.0089*	0.0100	238	250	-4.7	30.0
Iodomethane	Ave	0.3726	0.4008	0.1000	53.8	50.0	7.6	30.0
Isopropyl alcohol	Lin2		0.0046	0.0010	450	500	-9.9	30.0
Carbon disulfide	Ave	0.6896	0.6016	0.1000	43.6	50.0	-12.8	30.0
Acetonitrile	Ave	0.0442	0.0408	0.0010	461	500	-7.7	30.0
Methyl acetate	Ave	0.0876	0.0906*	0.1000	259	250	3.5	30.0
Methylene Chloride	Lin2		0.2508	0.0100	49.3	50.0	-1.5	30.0
2-Methyl-2-propanol	Ave	0.0090	0.0087	0.0010	480	500	-3.9	40.0
Acrylonitrile	Ave	0.0430	0.0420	0.0100	488	500	-2.5	30.0
Methyl tert-butyl ether	Ave	0.5243	0.5170	0.1000	49.3	50.0	-1.4	30.0
trans-1,2-Dichloroethene	Ave	0.3474	0.3374	0.1000	48.6	50.0	-2.9	30.0
Hexane	Ave	0.3640	0.3514	0.1000	48.3	50.0	-3.5	30.0
1,1-Dichloroethane	Ave	0.4689	0.4495	0.2000	47.9	50.0	-4.1	30.0
Isopropyl ether	Ave	0.6830	0.6776	0.1000	49.6	50.0	-0.8	30.0
Vinyl acetate	Ave	0.4374	0.4332	0.1000	99.0	100	-1.0	40.0
2-Chloro-1,3-butadiene	Ave	0.3909	0.3917	0.1000	50.1	50.0	0.2	30.0
Tert-butyl ethyl ether	Ave	0.6290	0.6036	0.1000	48.0	50.0	-4.0	30.0
2,2-Dichloropropane	Ave	0.4060	0.3835	0.1000	47.2	50.0	-5.5	30.0
cis-1,2-Dichloroethene	Ave	0.4157	0.3970	0.1000	47.8	50.0	-4.5	30.0
2-Butanone (MEK)	Ave	0.0146	0.0147	0.0100	251	250	0.5	30.0
Ethyl acetate	Ave	0.1106	0.0883	0.0100	79.9	100	-20.1	30.0
Propionitrile	Ave	0.0158	0.0148	0.0100	470	500	-5.9	30.0
Chlorobromomethane	Ave	0.1721	0.1703	0.1000	49.5	50.0	-1.1	30.0
Chloroform	Lin2		0.4809	0.2000	50.7	50.0	1.4	30.0
Tetrahydrofuran	Ave	0.0332	0.0305*	0.0500	91.9	100	-8.1	30.0
1,1,1-Trichloroethane	Ave	0.4519	0.4405	0.1000	48.7	50.0	-2.5	30.0
Cyclohexane	Ave	0.4568	0.4355	0.1000	47.7	50.0	-4.7	30.0
1,1-Dichloropropene	Ave	0.3841	0.3736	0.1000	48.6	50.0	-2.7	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: ICV 490-249241/12

Calibration Date: 05/18/2015 22:07

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 051815-28.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3993	0.4041	0.1000	50.6	50.0	1.2	30.0
Isobutyl alcohol	Ave	0.0039	0.0036	0.0010	1150	1250	-7.6	30.0
Benzene	Ave	1.135	1.098	0.5000	48.4	50.0	-3.3	30.0
t-Amyl alcohol	Ave	0.0079	0.0070	0.0010	444	500	-11.3	40.0
1,2-Dichloroethane	Ave	0.2977	0.2800	0.1000	47.0	50.0	-6.0	30.0
Tert-amyl methyl ether	Ave	0.5591	0.5470	0.1000	48.9	50.0	-2.2	30.0
n-Heptane	Ave	0.3183	0.3157	0.1000	49.6	50.0	-0.8	30.0
n-Butanol	Ave	0.0026	0.0024	0.0010	1140	1250	-8.5	30.0
Trichloroethene	Ave	0.3318	0.3309	0.2000	49.9	50.0	-0.3	30.0
Ethyl acrylate	Ave	0.1449	0.1508	0.1000	52.1	50.0	4.1	
Methylcyclohexane	Ave	0.5124	0.4959	0.1000	48.4	50.0	-3.2	30.0
1,2-Dichloropropane	Ave	0.2587	0.2512	0.1000	48.6	50.0	-2.9	30.0
Methyl methacrylate	Ave	0.1123	0.1142	0.1000	102	100	1.7	30.0
Dibromomethane	Ave	0.1281	0.1228	0.0500	47.9	50.0	-4.1	30.0
1,4-Dioxane	Ave	0.0010	0.0009*	0.0010	864	1000	-13.6	30.0
Dichlorobromomethane	Ave	0.3398	0.3429	0.2000	50.5	50.0	0.9	30.0
2-Chloroethyl vinyl ether	Ave	0.1310	0.1335	0.1000	50.9	50.0	1.9	30.0
cis-1,3-Dichloropropene	Ave	0.5084	0.5204	0.2000	51.2	50.0	2.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0604	0.0618	0.0500	256	250	2.3	30.0
Toluene	Ave	1.699	1.644	0.4000	48.4	50.0	-3.2	30.0
trans-1,3-Dichloropropene	Ave	0.3887	0.4200	0.0100	54.0	50.0	8.1	30.0
Ethyl methacrylate	Ave	0.2881	0.2870	0.1000	49.8	50.0	-0.4	30.0
1,1,2-Trichloroethane	Ave	0.2485	0.2388	0.1000	48.0	50.0	-3.9	30.0
Tetrachloroethene	Ave	0.4774	0.4556	0.2000	47.7	50.0	-4.6	30.0
1,3-Dichloropropane	Ave	0.4112	0.4000	0.1000	48.6	50.0	-2.7	30.0
2-Hexanone	Ave	0.0488	0.0519	0.0500	266	250	6.5	30.0
Chlorodibromomethane	Ave	0.2128	0.2268	0.1000	53.3	50.0	6.6	30.0
n-Butyl acetate	Ave	0.1420	0.1161	0.1000	40.9	50.0	-18.3	30.0
1,2-Dibromoethane	Ave	0.2226	0.2248	0.1000	50.5	50.0	0.9	30.0
Chlorobenzene	Ave	1.076	1.049	0.5000	48.8	50.0	-2.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3600	0.3740	0.1000	51.9	50.0	3.9	30.0
Ethylbenzene	Ave	1.700	1.745	0.1000	51.3	50.0	2.7	30.0
m-Xylene & p-Xylene	Ave	1.330	1.383	0.1000	52.0	50.0	4.0	30.0
o-Xylene	Ave	1.321	1.411	0.3000	53.4	50.0	6.8	30.0
Styrene	Ave	1.050	1.128	0.3000	53.7	50.0	7.5	30.0
Bromoform	Ave	0.1457	0.1706	0.0100	58.6	50.0	17.1	30.0
Isopropylbenzene	Ave	1.656	1.827	0.1000	55.2	50.0	10.3	30.0
Bromobenzene	Ave	0.9793	0.9548	0.1000	48.8	50.0	-2.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4149	0.4052	0.3000	48.8	50.0	-2.3	30.0
1,2,3-Trichloropropane	Ave	0.1303	0.1363	0.1000	52.3	50.0	4.6	30.0
trans-1,4-Dichloro-2-butene	Ave	0.0897	0.1069	0.1000	59.6	50.0	19.2	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 490-249241/12 Calibration Date: 05/18/2015 22:07

Instrument ID: HP32 Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/18/2015 20:46

Lab File ID: 051815-28.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	3.381	3.581	0.1000	53.0	50.0	5.9	30.0
2-Chlorotoluene	Ave	2.096	2.103	0.1000	50.2	50.0	0.3	30.0
1,3,5-Trimethylbenzene	Ave	2.479	2.694	0.1000	54.3	50.0	8.7	30.0
4-Chlorotoluene	Ave	2.411	2.511	0.1000	52.1	50.0	4.1	30.0
1,2,4-Trimethylbenzene	Ave	2.486	2.702	0.1000	54.3	50.0	8.7	30.0
sec-Butylbenzene	Ave	3.107	3.379	0.1000	54.4	50.0	8.7	30.0
1,3-Dichlorobenzene	Ave	1.434	1.491	0.6000	52.0	50.0	4.0	30.0
4-Isopropyltoluene	Ave	2.757	2.946	0.1000	53.4	50.0	6.9	30.0
1,4-Dichlorobenzene	Ave	1.552	1.527	0.5000	49.2	50.0	-1.6	30.0
1,2-Dichlorobenzene	Ave	1.303	1.345	0.4000	51.6	50.0	3.2	30.0
n-Butylbenzene	Ave	2.185	2.454	0.1000	56.2	50.0	12.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0754	0.0844	0.0100	55.9	50.0	11.9	30.0
1,3,5-Trichlorobenzene	Ave	0.9551	1.028	0.1000	53.8	50.0	7.6	30.0
1,2,4-Trichlorobenzene	Ave	0.7332	0.8123	0.2000	55.4	50.0	10.8	30.0
Hexachlorobutadiene	Ave	0.3914	0.4067	0.1000	52.0	50.0	3.9	30.0
Naphthalene	Lin2		1.278	0.0100	52.5	50.0	5.0	30.0
1,2,3-Trichlorobenzene	Ave	0.5760	0.6257	0.1000	54.3	50.0	8.6	30.0
Dibromofluoromethane (Surr)	Ave	0.2407	0.2358		24.5	25.0	-2.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2121	0.2080		24.5	25.0	-2.0	30.0
Toluene-d8 (Surr)	Ave	1.243	1.226		24.7	25.0	-1.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.7393	0.7446		25.2	25.0	0.7	30.0

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-28.D  
 Lims ID: icv  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 18-May-2015 22:07:30 ALS Bottle#: 28 Worklist Smp#: 12  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ICV  
 Misc. Info.: 490-0055131-012  
 Operator ID: EML Instrument ID: HP32  
 Sublist:  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:26 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: larsene Date: 19-May-2015 10:41:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.453	3.452	0.001	99	463764	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	346893	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	94	200683	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	109357	25.0	24.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	96440	25.0	24.5	
\$ 6 Toluene-d8 (Surr)	98	4.558	4.552	0.006	92	425128	25.0	24.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	96	149420	25.0	25.2	
9 Dichlorodifluoromethane	85	1.063	1.068	-0.005	99	281160	50.0	53.4	
10 Chloromethane	50	1.172	1.171	0.001	98	214804	50.0	47.3	
11 Vinyl chloride	62	1.215	1.215	0.000	98	236431	50.0	45.3	
12 Butadiene	54	1.232	1.237	-0.005	89	214993	50.0	46.3	
13 Bromomethane	96	1.384	1.384	0.000	91	169800	50.0	45.0	
14 Chloroethane	64	1.433	1.433	0.000	100	158873	50.0	47.8	
15 Dichlorofluoromethane	67	1.526	1.525	0.001	97	401117	50.0	48.0	
16 Trichlorofluoromethane	101	1.558	1.558	0.000	98	404341	50.0	46.3	
17 Ethanol	45	1.656	1.656	0.000	90	17800	2500.0	2135.7	
18 Ethyl ether	59	1.695	1.694	0.000	88	138192	50.0	47.1	
19 Acrolein	56	1.771	1.770	0.001	98	41942	125.0	123.1	
20 1,1,2-Trichloro-1,2,2-trif	101	1.809	1.808	0.001	94	248090	50.0	47.0	
21 1,1-Dichloroethene	96	1.814	1.814	0.000	97	222396	50.0	45.8	
22 Acetone	58	1.847	1.846	0.001	100	41124	250.0	238.3	
23 Iodomethane	142	1.901	1.901	0.000	98	371736	50.0	53.8	
24 Isopropyl alcohol	45	1.912	1.912	0.000	100	42575	500.0	450.4	
25 Carbon disulfide	76	1.934	1.933	0.001	99	558000	50.0	43.6	
26 Acetonitrile	41	1.994	1.993	0.001	74	378028	500.0	461.4	
27 3-Chloro-1-propene	76	1.994	1.993	0.001	92	213388	NC	NC	
28 Methyl acetate	43	2.005	2.004	0.001	97	420367	250.0	258.8	
30 Methylene Chloride	84	2.059	2.059	0.000	87	232633	50.0	49.3	
31 2-Methyl-2-propanol	59	2.114	2.119	-0.005	99	80292	500.0	480.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Acrylonitrile	53	2.190	2.189	0.001	99	389323	500.0	487.7	
34 trans-1,2-Dichloroethene	61	2.201	2.200	0.001	82	312923	50.0	48.6	
33 Methyl tert-butyl ether	73	2.201	2.200	0.001	94	479522	50.0	49.3	
35 Hexane	57	2.337	2.336	0.001	90	325909	50.0	48.3	
36 1,1-Dichloroethane	63	2.424	2.423	0.001	96	416941	50.0	47.9	
37 Vinyl acetate	43	2.451	2.451	0.000	97	803618	100.0	99.0	
38 Isopropyl ether	45	2.451	2.456	-0.005	82	628471	50.0	49.6	
39 2-Chloro-1,3-butadiene	53	2.473	2.472	0.001	91	363345	50.0	50.1	
40 Tert-butyl ethyl ether	59	2.658	2.657	0.001	96	559835	50.0	48.0	
42 cis-1,2-Dichloroethene	61	2.751	2.750	0.001	80	368195	50.0	47.8	
41 2,2-Dichloropropane	77	2.751	2.750	0.001	75	355689	50.0	47.2	
43 2-Butanone (MEK)	72	2.767	2.766	0.001	100	68266	250.0	251.3	
44 Ethyl acetate	43	2.789	2.788	0.001	99	163797	100.0	79.9	
45 Propionitrile	54	2.800	2.804	-0.004	99	137492	500.0	470.5	
46 Methacrylonitrile	41	2.887	2.886	0.001	90	639097	500.0	483.5	
47 Chlorobromomethane	130	2.892	2.892	0.000	79	157925	50.0	49.5	
48 Tetrahydrofuran	42	2.930	2.930	0.000	75	56531	100.0	91.9	
49 Chloroform	83	2.930	2.930	0.000	93	446014	50.0	50.7	
50 1,1,1-Trichloroethane	97	3.044	3.044	0.000	98	408570	50.0	48.7	
51 Cyclohexane	56	3.077	3.077	0.000	88	403966	50.0	47.7	
53 1,1-Dichloropropene	75	3.148	3.142	0.006	97	346476	50.0	48.6	
54 Carbon tetrachloride	117	3.148	3.147	0.001	96	374780	50.0	50.6	
55 Isobutyl alcohol	43	3.224	3.224	0.000	95	82923	1250.0	1154.9	
56 Benzene	78	3.279	3.278	0.001	95	1018403	50.0	48.4	
57 t-Amyl alcohol	59	3.284	3.283	0.001	67	64956	500.0	443.6	
58 1,2-Dichloroethane	62	3.289	3.289	0.000	98	259659	50.0	47.0	
59 Tert-amyl methyl ether	73	3.344	3.343	0.001	98	507321	50.0	48.9	
60 n-Heptane	43	3.426	3.425	0.001	89	292822	50.0	49.6	
61 n-Butanol	56	3.660	3.665	-0.004	87	55273	1250.0	1143.1	
62 Trichloroethene	130	3.692	3.692	0.000	97	306930	50.0	49.9	
63 Ethyl acrylate	55	3.763	3.762	0.001	99	139887	50.0	52.1	
64 Methylcyclohexane	83	3.817	3.817	0.000	86	459974	50.0	48.4	
65 1,2-Dichloropropane	63	3.845	3.844	0.001	94	232974	50.0	48.6	
66 Methyl methacrylate	41	3.921	3.920	0.001	87	211840	100.0	101.7	
67 Dibromomethane	93	3.926	3.926	0.000	93	113940	50.0	47.9	
68 1,4-Dioxane	88	3.954	3.958	-0.004	94	15868	1000.0	863.7	
70 Dichlorobromomethane	83	4.030	4.029	0.001	99	318025	50.0	50.5	
71 2-Nitropropane	43	4.204	4.198	0.006	97	58999	100.0	96.1	
72 2-Chloroethyl vinyl ether	63	4.248	4.247	0.001	92	92593	50.0	50.9	
73 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	361032	50.0	51.2	
74 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	214283	250.0	255.9	
75 Toluene	91	4.607	4.606	0.001	99	1140650	50.0	48.4	
76 trans-1,3-Dichloropropene	75	4.776	4.775	0.001	91	291416	50.0	54.0	
77 Ethyl methacrylate	69	4.852	4.851	0.001	87	199101	50.0	49.8	
78 1,1,2-Trichloroethane	97	4.917	4.917	0.001	90	165660	50.0	48.0	
79 Tetrachloroethene	166	5.026	5.025	0.001	98	316119	50.0	47.7	
80 1,3-Dichloropropane	76	5.053	5.053	0.000	88	277539	50.0	48.6	
81 2-Hexanone	58	5.129	5.129	0.000	94	180136	250.0	266.2	
82 Chlorodibromomethane	127	5.233	5.232	0.001	89	157324	50.0	53.3	
83 n-Butyl acetate	43	5.238	5.238	0.000	98	107647	50.0	40.9	
84 Ethylene Dibromide	107	5.331	5.330	0.001	99	155929	50.0	50.5	
85 1-Chlorohexane	91	5.717	5.717	0.000	94	358402	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 Chlorobenzene	112	5.739	5.738	0.001	96	728113	50.0	48.8	
87 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	259506	50.0	51.9	
88 Ethylbenzene	91	5.832	5.831	0.001	97	1210842	50.0	51.3	
89 m-Xylene & p-Xylene	91	5.935	5.934	0.001	0	959455	50.0	52.0	
90 o-Xylene	91	6.278	6.277	0.001	96	979163	50.0	53.4	
91 Styrene	104	6.294	6.294	0.000	94	782832	50.0	53.7	
92 Bromoform	173	6.458	6.457	0.001	98	118353	50.0	58.6	
93 Isopropylbenzene	105	6.610	6.609	0.001	95	1267695	50.0	55.2	
94 Cyclohexanone	55	6.708	6.702	0.006	91	24506	500.0	339.7	
95 Bromobenzene	77	6.877	6.876	0.001	90	383231	50.0	48.8	
96 1,1,2,2-Tetrachloroethane	83	6.893	6.892	0.001	94	162634	50.0	48.8	
97 1,2,3-Trichloropropane	110	6.926	6.925	0.001	81	54709	50.0	52.3	
98 trans-1,4-Dichloro-2-butene	53	6.953	6.947	0.006	92	42918	50.0	59.6	
99 N-Propylbenzene	91	6.986	6.985	0.001	98	1437382	50.0	53.0	
100 2-Chlorotoluene	91	7.062	7.061	0.001	97	843980	50.0	50.2	
101 1,3,5-Trimethylbenzene	105	7.160	7.159	0.001	95	1081401	50.0	54.3	
102 4-Chlorotoluene	91	7.160	7.159	0.001	98	1007773	50.0	52.1	
103 tert-Butylbenzene	119	7.454	7.453	0.001	92	924375	50.0	53.7	
104 1,2,4-Trimethylbenzene	105	7.503	7.502	0.001	97	1084305	50.0	54.3	
106 sec-Butylbenzene	105	7.661	7.660	0.001	94	1356049	50.0	54.4	
107 1,3-Dichlorobenzene	146	7.759	7.758	0.001	98	598390	50.0	52.0	
108 4-Isopropyltoluene	119	7.808	7.807	0.001	97	1182524	50.0	53.4	
109 1,4-Dichlorobenzene	146	7.846	7.845	0.001	96	613017	50.0	49.2	
110 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	1035577	50.0	51.3	
111 Benzyl chloride	91	7.982	7.981	0.001	98	292787	50.0	48.5	
112 1,2-Dichlorobenzene	146	8.194	8.193	0.001	97	539849	50.0	51.6	
113 n-Butylbenzene	91	8.199	8.193	0.006	97	985140	50.0	56.2	
114 1,2-Dibromo-3-Chloropropan	157	8.951	8.950	0.001	92	33877	50.0	55.9	
115 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	412617	50.0	53.8	
116 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	326038	50.0	55.4	
117 Hexachlorobutadiene	225	9.979	9.979	0.000	96	163238	50.0	52.0	
118 Naphthalene	128	10.050	10.055	-0.005	96	513100	50.0	52.5	
119 1,2,3-Trichlorobenzene	180	10.350	10.349	0.001	95	251142	50.0	54.3	
S 135 Xylenes, Total	1				0		100.0	105.4	
S 136 1,3-Dichloropropene, Total	1				0		100.0	105.2	
S 132 1,2-Dichloroethene, Total	1				0		100.0	96.3	
S 133 Trihalomethanes, Total	1				0		200.0	213.0	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

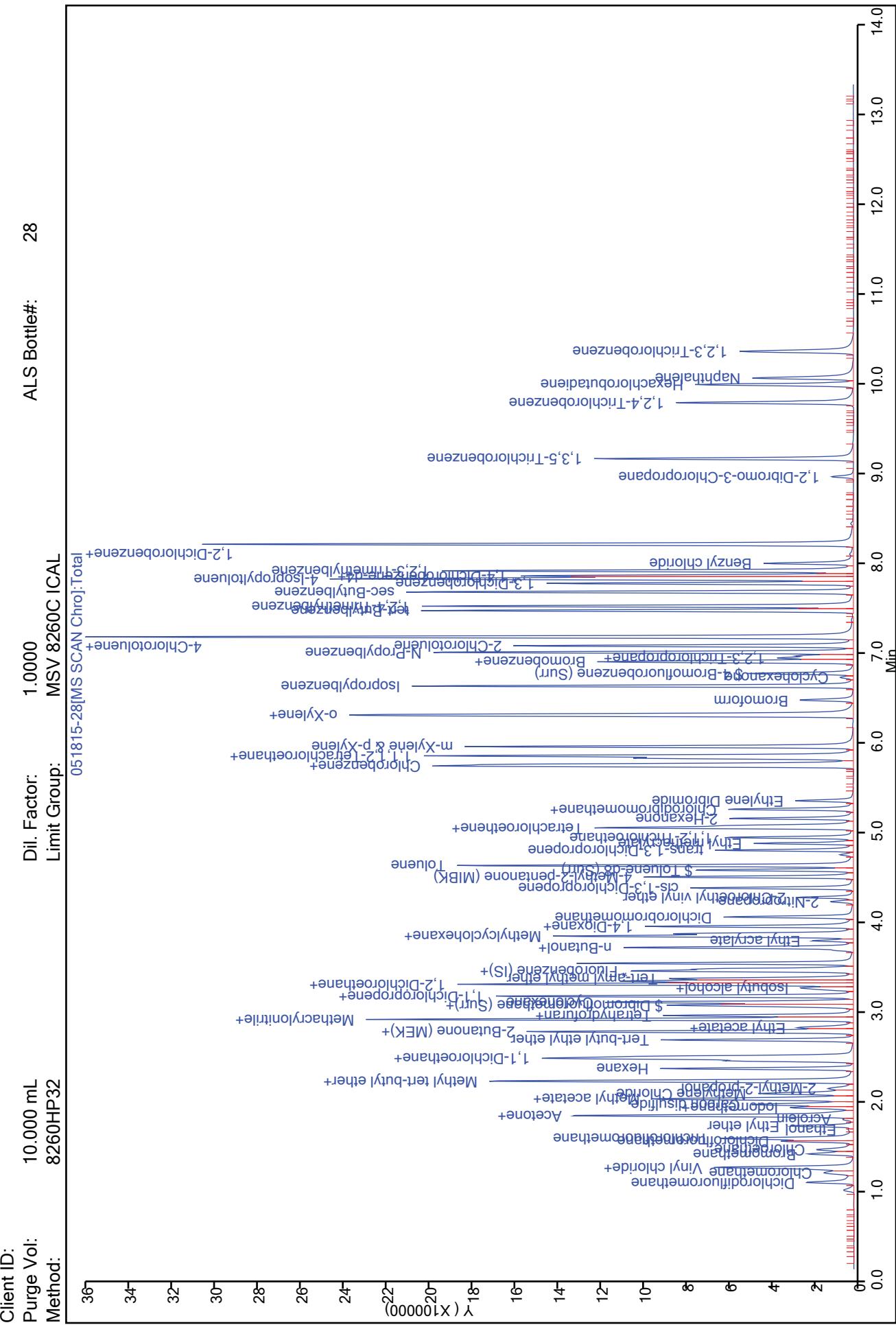
**Reagents:**

V2_Mega_I_00040	Amount Added: 50.00	Units: uL	
V2_gases_I_00078	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 19-May-2015 11:39:30

Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Nashville  
\\NV\\chrom\\ChromData\\HP32\\2015\\05\\18-55131.b\\051815-28.D  
18-May-2015 22:07:30      Instrument ID: HP32  
icv



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 490-253850/2 Calibration Date: 06/05/2015 11:19  
Instrument ID: HP32 Calib Start Date: 03/13/2015 11:26  
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/13/2015 14:31  
Lab File ID: 060515-02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3-Chloro-1-propene	Ave	0.1558	0.2492	0.1000		50.0	60.0*	20.0

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-02.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 05-Jun-2015 11:19:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ccvis  
 Misc. Info.: 490-0056059-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:00:19 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:00:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	100	389508	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.711	0.000	84	284711	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	95	159248	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	92933	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	81710	25.0	24.7	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	369713	25.0	26.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	95	126932	25.0	27.0	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	206084	50.0	46.6	
11 Chloromethane	50	1.177	1.177	0.000	98	154797	50.0	40.6	
12 Vinyl chloride	62	1.215	1.215	0.000	98	205242	50.0	46.8	
13 Butadiene	54	1.231	1.231	0.000	88	190561	50.0	48.8	
14 Bromomethane	96	1.378	1.378	0.000	90	136085	50.0	42.9	
15 Chloroethane	64	1.427	1.427	0.000	100	141551	50.0	50.8	
16 Dichlorofluoromethane	67	1.520	1.520	0.000	97	348536	50.0	49.7	
17 Trichlorofluoromethane	101	1.552	1.552	0.000	98	338639	50.0	46.1	
18 Ethanol	45	1.661	1.661	0.000	97	15578	2000.0	2226.3	
19 Ethyl ether	59	1.694	1.694	0.000	87	115310	50.0	46.8	
20 Acrolein	56	1.765	1.765	0.000	99	32412	125.0	113.3	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	93	202329	50.0	45.6	
22 1,1-Dichloroethene	96	1.808	1.808	0.000	96	190056	50.0	46.6	
23 Acetone	58	1.846	1.846	0.000	100	32550	250.0	224.5	
24 Iodomethane	142	1.895	1.895	0.000	98	172436	50.0	29.7	
25 Isopropyl alcohol	45	1.912	1.912	0.000	100	38010	500.0	478.9	
26 Carbon disulfide	76	1.934	1.934	0.000	99	446045	50.0	41.5	
28 Acetonitrile	41	1.988	1.988	0.000	83	331057	500.0	481.1	
29 3-Chloro-1-propene	76	1.993	1.993	0.000	92	194110	NC	NC	
30 Methyl acetate	43	2.004	2.004	0.000	96	316435	250.0	231.9	
31 Methylene Chloride	84	2.053	2.053	0.000	87	191669	50.0	48.3	
32 2-Methyl-2-propanol	59	2.119	2.119	0.000	99	65273	500.0	465.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.189	2.189	0.000	99	316509	500.0	472.1	
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	99	257454	50.0	47.6	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	376304	50.0	46.1	
36 Hexane	57	2.336	2.336	0.000	89	280301	50.0	49.4	
37 1,1-Dichloroethane	63	2.423	2.423	0.000	96	341459	50.0	46.7	
39 Vinyl acetate	43	2.445	2.445	0.000	98	658082	100.0	96.6	
38 Isopropyl ether	45	2.451	2.451	0.000	82	510367	50.0	48.0	
40 2-Chloro-1,3-butadiene	53	2.472	2.472	0.000	91	291336	50.0	47.8	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	96	452224	50.0	46.1	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	76	320084	50.0	50.6	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	305903	50.0	47.2	
44 2-Butanone (MEK)	72	2.766	2.766	0.000	98	55305	250.0	242.4	
45 Ethyl acetate	43	2.788	2.788	0.000	98	166067	100.0	96.4	
46 Propionitrile	54	2.799	2.799	0.000	99	126358	500.0	514.8	
47 Methacrylonitrile	41	2.886	2.886	0.000	90	524944	500.0	472.8	
48 Chlorobromomethane	130	2.886	2.886	0.000	76	128171	50.0	47.8	
50 Chloroform	83	2.924	2.924	0.000	92	368993	50.0	49.9	
49 Tetrahydrofuran	42	2.930	2.930	0.000	85	47158	100.0	91.2	
51 1,1,1-Trichloroethane	97	3.044	3.044	0.000	98	336134	50.0	47.7	
53 Cyclohexane	56	3.077	3.077	0.000	87	342833	50.0	48.2	
55 Carbon tetrachloride	117	3.142	3.142	0.000	96	302944	50.0	48.7	
54 1,1-Dichloropropene	75	3.142	3.142	0.000	98	288952	50.0	48.3	
56 Isobutyl alcohol	43	3.224	3.224	0.000	94	72284	1250.0	1198.7	
57 Benzene	78	3.273	3.273	0.000	95	864945	50.0	48.9	
58 t-Amyl alcohol	59	3.283	3.283	0.000	76	52099	500.0	423.6	
59 1,2-Dichloroethane	62	3.283	3.283	0.000	98	211464	50.0	45.6	
60 Tert-amyl methyl ether	73	3.343	3.343	0.000	97	394715	50.0	45.3	
61 n-Heptane	43	3.425	3.425	0.000	88	256429	50.0	51.7	
62 n-Butanol	56	3.665	3.665	0.000	86	49475	1250.0	1218.3	
63 Trichloroethene	130	3.686	3.686	0.000	97	244736	50.0	47.3	
64 Ethyl acrylate	55	3.763	3.763	0.000	98	112927	50.0	50.0	
65 Methylcyclohexane	83	3.812	3.812	0.000	85	385986	50.0	48.4	
66 1,2-Dichloropropane	63	3.844	3.844	0.000	95	190939	50.0	47.4	
67 Methyl methacrylate	41	3.920	3.920	0.000	87	165577	100.0	94.6	
68 Dibromomethane	93	3.926	3.926	0.000	91	93098	50.0	46.6	
69 1,4-Dioxane	88	3.958	3.958	0.000	90	17361	1000.0	1125.2	
71 Dichlorobromomethane	83	4.029	4.029	0.000	99	255962	50.0	48.3	
72 2-Nitropropane	43	4.198	4.198	0.000	97	47356	100.0	91.8	
73 2-Chloroethyl vinyl ether	63	4.247	4.247	0.000	92	66530	50.0	44.6	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	98	296326	50.0	51.2	
75 4-Methyl-2-pentanone (MIBK)	58	4.481	4.481	0.000	94	170647	250.0	248.3	
76 Toluene	91	4.606	4.606	0.000	98	952434	50.0	49.2	
77 trans-1,3-Dichloropropene	75	4.775	4.775	0.000	90	225903	50.0	51.0	
78 Ethyl methacrylate	69	4.851	4.851	0.000	87	159914	50.0	48.7	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	134020	50.0	47.4	
80 Tetrachloroethene	166	5.025	5.025	0.000	98	254732	50.0	46.9	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	86	230531	50.0	49.2	
82 2-Hexanone	58	5.134	5.134	0.000	93	156698	250.0	282.1	
83 Chlorodibromomethane	127	5.232	5.232	0.000	90	129625	50.0	53.5	
84 n-Butyl acetate	43	5.238	5.238	0.000	97	118872	50.0	53.7	
85 Ethylene Dibromide	107	5.330	5.330	0.000	99	128045	50.0	50.5	
86 1-Chlorohexane	91	5.717	5.717	0.000	93	308818	50.0	50.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.739	5.739	0.000	97	608733	50.0	49.7	
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	209696	50.0	51.1	
89 Ethylbenzene	91	5.831	5.831	0.000	97	1024035	50.0	52.9	
90 m-Xylene & p-Xylene	91	5.934	5.934	0.000	0	800416	50.0	52.9	
91 o-Xylene	91	6.277	6.277	0.000	96	825514	50.0	54.9	
92 Styrene	104	6.294	6.294	0.000	94	663828	50.0	55.5	
93 Bromoform	173	6.457	6.457	0.000	98	87028	50.0	52.5	
94 Isopropylbenzene	105	6.609	6.609	0.000	95	1033392	50.0	54.8	
95 Cyclohexanone	55	6.707	6.707	0.000	90	29962	500.0	494.2	
96 Bromobenzene	77	6.876	6.876	0.000	90	319086	50.0	51.2	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	133969	50.0	50.7	
98 1,2,3-Trichloropropane	110	6.925	6.925	0.000	81	41025	50.0	49.4	
99 trans-1,4-Dichloro-2-butene	53	6.952	6.952	0.000	82	31411	50.0	55.0	
100 N-Propylbenzene	91	6.991	6.991	0.000	98	1202958	50.0	55.9	
101 2-Chlorotoluene	91	7.061	7.061	0.000	98	698230	50.0	52.3	
102 1,3,5-Trimethylbenzene	105	7.159	7.159	0.000	94	889501	50.0	56.3	
103 4-Chlorotoluene	91	7.165	7.165	0.000	98	835760	50.0	54.4	
104 tert-Butylbenzene	119	7.453	7.453	0.000	92	749073	50.0	54.8	
106 1,2,4-Trimethylbenzene	105	7.502	7.502	0.000	97	894138	50.0	56.5	
107 sec-Butylbenzene	105	7.660	7.660	0.000	94	1117005	50.0	56.4	
108 1,3-Dichlorobenzene	146	7.758	7.758	0.000	98	481398	50.0	52.7	
109 4-Isopropyltoluene	119	7.807	7.807	0.000	96	986773	50.0	56.2	
110 1,4-Dichlorobenzene	146	7.845	7.845	0.000	95	494949	50.0	50.1	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	99	862984	50.0	53.9	
112 Benzyl chloride	91	7.981	7.981	0.000	98	255248	50.0	51.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	98	429668	50.0	51.8	
114 n-Butylbenzene	91	8.199	8.199	0.000	97	838024	50.0	60.2	
115 1,2-Dibromo-3-Chloropropan	157	8.950	8.950	0.000	91	24328	50.0	50.6	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	331396	50.0	54.5	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	93	254480	50.0	54.5	
118 Hexachlorobutadiene	225	9.979	9.979	0.000	97	125596	50.0	50.4	
119 Naphthalene	128	10.055	10.055	0.000	96	390033	50.0	50.3	
120 1,2,3-Trichlorobenzene	180	10.349	10.349	0.000	96	197058	50.0	53.7	
S 134 Xylenes, Total	1				0		100.0	107.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	102.2	
S 137 1,2-Dichloroethene, Total	1				0		100.0	94.8	
S 138 Trihalomethanes, Total	1				0		200.0	204.2	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

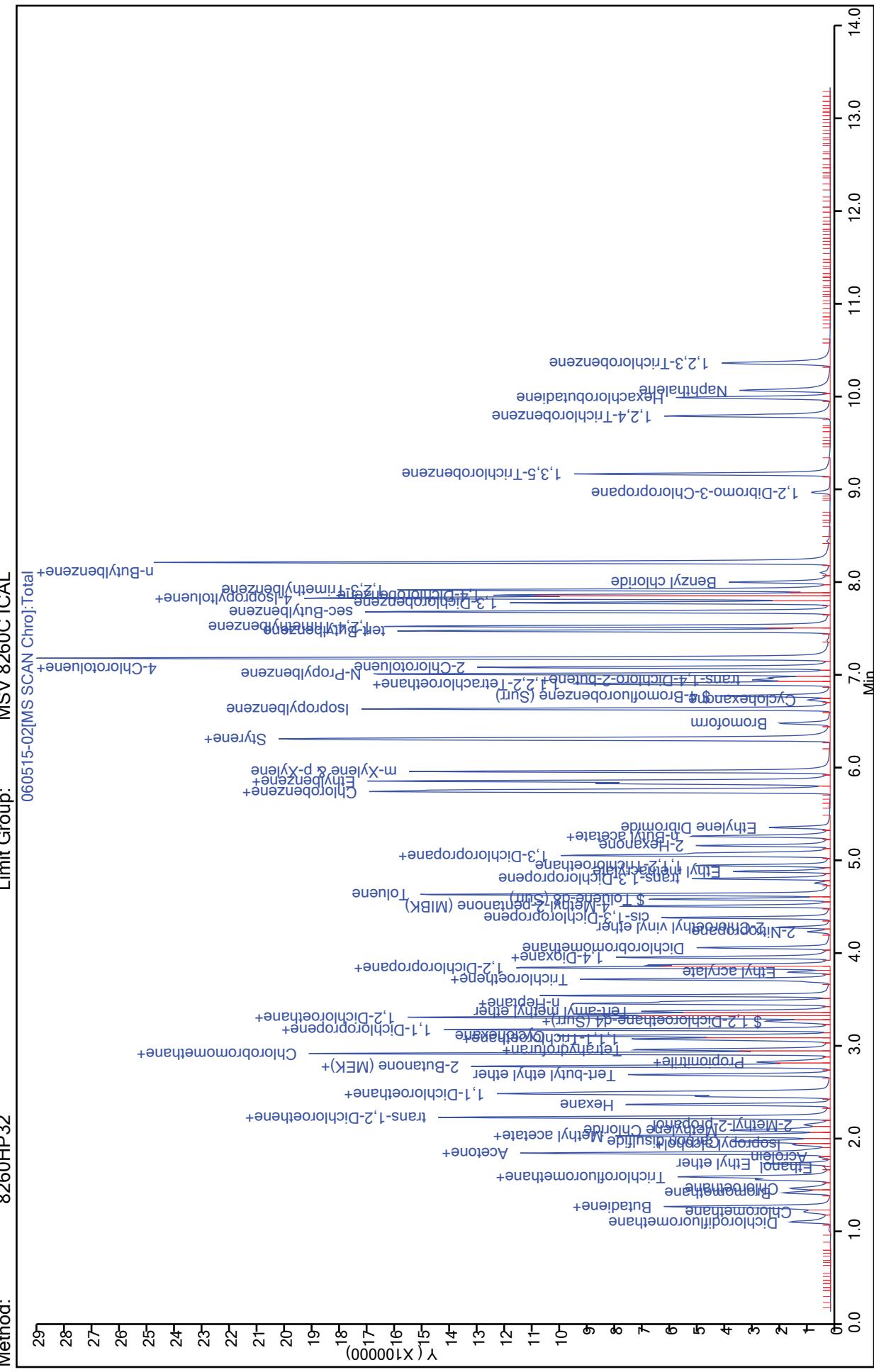
V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 08-Jun-2015 13:00:21

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-02.D  
Injection Date: 05-Jun-2015 11:19:30  
Lims ID: CCVIS  
Client ID:  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 2  
ALS Bottle#: 2



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-253850/2

Calibration Date: 06/05/2015 11:19

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2840	0.2645	0.1000	46.6	50.0	-6.9	20.0
Chloromethane	Lin2		0.1987	0.1000	40.6	50.0	-18.8	20.0
Vinyl chloride	Ave	0.2813	0.2635	0.1000	46.8	50.0	-6.3	20.0
Butadiene	Ave	0.2505	0.2446	0.1000	48.8	50.0	-2.3	20.0
Bromomethane	Ave	0.2034	0.1747	0.1000	42.9	50.0	-14.1	20.0
Chloroethane	Lin2		0.1817	0.1000	50.8	50.0	1.5	20.0
Dichlorofluoromethane	Ave	0.4503	0.4474	0.1000	49.7	50.0	-0.6	20.0
Trichlorofluoromethane	Ave	0.4711	0.4347	0.1000	46.1	50.0	-7.7	20.0
Ethanol	Lin2	0.0006	0.0005*	0.0010	2230	2000	11.3	20.0
Ethyl ether	Ave	0.1582	0.1480	0.1000	46.8	50.0	-6.4	20.0
Acrolein	Ave	0.0184	0.0166	0.0100	113	125	-9.4	20.0
Freon-113	Ave	0.2847	0.2597	0.1000	45.6	50.0	-8.8	20.0
1,1-Dichloroethene	Ave	0.2618	0.2440	0.1000	46.6	50.0	-6.8	20.0
Acetone	Lin2		0.0084*	0.0100	224	250	-10.2	20.0
Iodomethane	Ave	0.3726	0.2214	0.1000	29.7	50.0	-40.6*	20.0
Isopropyl alcohol	Lin2		0.0049	0.0010	479	500	-4.2	20.0
Carbon disulfide	Ave	0.6896	0.5726	0.1000	41.5	50.0	-17.0	20.0
Acetonitrile	Ave	0.0442	0.0425	0.0010	481	500	-3.8	20.0
Methyl acetate	Ave	0.0876	0.0812*	0.1000	232	250	-7.2	20.0
Methylene Chloride	Lin2		0.2460	0.0100	48.3	50.0	-3.3	20.0
2-Methyl-2-propanol	Ave	0.0090	0.0084	0.0010	465	500	-7.0	20.0
Acrylonitrile	Ave	0.0430	0.0406	0.0100	472	500	-5.6	20.0
Methyl tert-butyl ether	Ave	0.5243	0.4831	0.1000	46.1	50.0	-7.9	20.0
trans-1,2-Dichloroethene	Ave	0.3474	0.3305	0.1000	47.6	50.0	-4.9	20.0
Hexane	Ave	0.3640	0.3598	0.1000	49.4	50.0	-1.2	20.0
1,1-Dichloroethane	Ave	0.4689	0.4383	0.2000	46.7	50.0	-6.5	20.0
Vinyl acetate	Ave	0.4374	0.4224	0.1000	96.6	100	-3.4	20.0
Isopropyl ether	Ave	0.6830	0.6551	0.1000	48.0	50.0	-4.1	20.0
2-Chloro-1,3-butadiene	Ave	0.3909	0.3740	0.1000	47.8	50.0	-4.3	20.0
Tert-butyl ethyl ether	Ave	0.6290	0.5805	0.1000	46.1	50.0	-7.7	20.0
2,2-Dichloropropane	Ave	0.4060	0.4109	0.1000	50.6	50.0	1.2	20.0
cis-1,2-Dichloroethene	Ave	0.4157	0.3927	0.1000	47.2	50.0	-5.5	20.0
2-Butanone (MEK)	Ave	0.0146	0.0142	0.0100	242	250	-3.0	20.0
Ethyl acetate	Ave	0.1106	0.1066	0.0100	96.4	100	-3.6	20.0
Propionitrile	Ave	0.0158	0.0162	0.0100	515	500	3.0	20.0
Chlorobromomethane	Ave	0.1721	0.1645	0.1000	47.8	50.0	-4.4	20.0
Chloroform	Lin2		0.4737	0.2000	49.9	50.0	-0.2	20.0
Tetrahydrofuran	Ave	0.0332	0.0303*	0.0500	91.2	100	-8.8	20.0
1,1,1-Trichloroethane	Ave	0.4519	0.4315	0.1000	47.7	50.0	-4.5	20.0
Cyclohexane	Ave	0.4568	0.4401	0.1000	48.2	50.0	-3.7	20.0
1,1-Dichloropropene	Ave	0.3841	0.3709	0.1000	48.3	50.0	-3.4	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-253850/2

Calibration Date: 06/05/2015 11:19

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3993	0.3889	0.1000	48.7	50.0	-2.6	20.0
Isobutyl alcohol	Ave	0.0039	0.0037	0.0010	1200	1250	-4.1	20.0
Benzene	Ave	1.135	1.110	0.5000	48.9	50.0	-2.2	20.0
1,2-Dichloroethane	Ave	0.2977	0.2715	0.1000	45.6	50.0	-8.8	20.0
t-Amyl alcohol	Ave	0.0079	0.0067	0.0010	424	500	-15.3	20.0
Tert-amyl methyl ether	Ave	0.5591	0.5067	0.1000	45.3	50.0	-9.4	20.0
n-Heptane	Ave	0.3183	0.3292	0.1000	51.7	50.0	3.4	20.0
n-Butanol	Ave	0.0026	0.0025	0.0010	1220	1250	-2.5	20.0
Trichloroethene	Ave	0.3318	0.3142	0.2000	47.3	50.0	-5.3	20.0
Ethyl acrylate	Ave	0.1449	0.1450	0.1000	50.0	50.0	0.0	20.0
Methylcyclohexane	Ave	0.5124	0.4955	0.1000	48.4	50.0	-3.3	20.0
1,2-Dichloropropane	Ave	0.2587	0.2451	0.1000	47.4	50.0	-5.2	20.0
Methyl methacrylate	Ave	0.1123	0.1063	0.1000	94.6	100	-5.4	20.0
Dibromomethane	Ave	0.1281	0.1195	0.0500	46.6	50.0	-6.7	20.0
1,4-Dioxane	Ave	0.0010	0.0011	0.0010	1130	1000	12.5	20.0
Dichlorobromomethane	Ave	0.3398	0.3286	0.2000	48.3	50.0	-3.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1310	0.1168	0.1000	44.6	50.0	-10.8	20.0
cis-1,3-Dichloropropene	Ave	0.5084	0.5204	0.2000	51.2	50.0	2.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0604	0.0599	0.0500	248	250	-0.7	20.0
Toluene	Ave	1.699	1.673	0.4000	49.2	50.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.3887	0.3967	0.0100	51.0	50.0	2.1	20.0
Ethyl methacrylate	Ave	0.2881	0.2808	0.1000	48.7	50.0	-2.5	20.0
1,1,2-Trichloroethane	Ave	0.2485	0.2354	0.1000	47.4	50.0	-5.3	20.0
Tetrachloroethene	Ave	0.4774	0.4474	0.2000	46.9	50.0	-6.3	20.0
1,3-Dichloropropane	Ave	0.4112	0.4049	0.1000	49.2	50.0	-1.6	20.0
2-Hexanone	Ave	0.0488	0.0550	0.0500	282	250	12.8	20.0
Chlorodibromomethane	Ave	0.2128	0.2276	0.1000	53.5	50.0	7.0	20.0
n-Butyl acetate	Ave	0.1420	0.1526	0.1000	53.7	50.0	7.4	20.0
1,2-Dibromoethane	Ave	0.2226	0.2249	0.1000	50.5	50.0	1.0	20.0
Chlorobenzene	Ave	1.076	1.069	0.5000	49.7	50.0	-0.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3600	0.3683	0.1000	51.1	50.0	2.3	20.0
Ethylbenzene	Ave	1.700	1.798	0.1000	52.9	50.0	5.8	20.0
m-Xylene & p-Xylene	Ave	1.330	1.406	0.1000	52.9	50.0	5.7	20.0
o-Xylene	Ave	1.321	1.450	0.3000	54.9	50.0	9.7	20.0
Styrene	Ave	1.050	1.166	0.3000	55.5	50.0	11.0	20.0
Bromoform	Ave	0.1457	0.1528	0.0100	52.5	50.0	4.9	20.0
Isopropylbenzene	Ave	1.656	1.815	0.1000	54.8	50.0	9.6	20.0
Bromobenzene	Ave	0.9793	1.002	0.1000	51.2	50.0	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4149	0.4206	0.3000	50.7	50.0	1.4	20.0
1,2,3-Trichloropropane	Ave	0.1303	0.1288	0.1000	49.4	50.0	-1.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0897	0.0986*	0.1000	55.0	50.0	9.9	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 490-253850/2 Calibration Date: 06/05/2015 11:19

Instrument ID: HP32 Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	3.381	3.777	0.1000	55.9	50.0	11.7	20.0
2-Chlorotoluene	Ave	2.096	2.192	0.1000	52.3	50.0	4.6	20.0
1,3,5-Trimethylbenzene	Ave	2.479	2.793	0.1000	56.3	50.0	12.6	20.0
4-Chlorotoluene	Ave	2.411	2.624	0.1000	54.4	50.0	8.8	20.0
1,2,4-Trimethylbenzene	Ave	2.486	2.807	0.1000	56.5	50.0	12.9	20.0
sec-Butylbenzene	Ave	3.107	3.507	0.1000	56.4	50.0	12.9	20.0
1,3-Dichlorobenzene	Ave	1.434	1.511	0.6000	52.7	50.0	5.4	20.0
4-Isopropyltoluene	Ave	2.757	3.098	0.1000	56.2	50.0	12.4	20.0
1,4-Dichlorobenzene	Ave	1.552	1.554	0.5000	50.1	50.0	0.1	20.0
1,2-Dichlorobenzene	Ave	1.303	1.349	0.4000	51.8	50.0	3.5	20.0
n-Butylbenzene	Ave	2.185	2.631	0.1000	60.2	50.0	20.4*	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0754	0.0764	0.0100	50.6	50.0	1.2	20.0
1,3,5-Trichlorobenzene	Ave	0.9551	1.041	0.1000	54.5	50.0	8.9	20.0
1,2,4-Trichlorobenzene	Ave	0.7332	0.7990	0.2000	54.5	50.0	9.0	20.0
Hexachlorobutadiene	Ave	0.3914	0.3943	0.1000	50.4	50.0	0.7	20.0
Naphthalene	Lin2		1.225	0.0100	50.3	50.0	0.6	20.0
1,2,3-Trichlorobenzene	Ave	0.5760	0.6187	0.1000	53.7	50.0	7.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2407	0.2386		24.8	25.0	-0.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2121	0.2098		24.7	25.0	-1.1	20.0
Toluene-d8 (Surr)	Ave	1.243	1.299		26.1	25.0	4.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7393	0.7971		27.0	25.0	7.8	20.0

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-02.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 05-Jun-2015 11:19:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ccvis  
 Misc. Info.: 490-0056059-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:00:19 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:00:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	100	389508	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.711	0.000	84	284711	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	95	159248	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	92933	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	81710	25.0	24.7	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	369713	25.0	26.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	95	126932	25.0	27.0	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	206084	50.0	46.6	
11 Chloromethane	50	1.177	1.177	0.000	98	154797	50.0	40.6	
12 Vinyl chloride	62	1.215	1.215	0.000	98	205242	50.0	46.8	
13 Butadiene	54	1.231	1.231	0.000	88	190561	50.0	48.8	
14 Bromomethane	96	1.378	1.378	0.000	90	136085	50.0	42.9	
15 Chloroethane	64	1.427	1.427	0.000	100	141551	50.0	50.8	
16 Dichlorofluoromethane	67	1.520	1.520	0.000	97	348536	50.0	49.7	
17 Trichlorofluoromethane	101	1.552	1.552	0.000	98	338639	50.0	46.1	
18 Ethanol	45	1.661	1.661	0.000	97	15578	2000.0	2226.3	
19 Ethyl ether	59	1.694	1.694	0.000	87	115310	50.0	46.8	
20 Acrolein	56	1.765	1.765	0.000	99	32412	125.0	113.3	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	93	202329	50.0	45.6	
22 1,1-Dichloroethene	96	1.808	1.808	0.000	96	190056	50.0	46.6	
23 Acetone	58	1.846	1.846	0.000	100	32550	250.0	224.5	
24 Iodomethane	142	1.895	1.895	0.000	98	172436	50.0	29.7	
25 Isopropyl alcohol	45	1.912	1.912	0.000	100	38010	500.0	478.9	
26 Carbon disulfide	76	1.934	1.934	0.000	99	446045	50.0	41.5	
28 Acetonitrile	41	1.988	1.988	0.000	83	331057	500.0	481.1	
29 3-Chloro-1-propene	76	1.993	1.993	0.000	92	194110	NC	NC	
30 Methyl acetate	43	2.004	2.004	0.000	96	316435	250.0	231.9	
31 Methylene Chloride	84	2.053	2.053	0.000	87	191669	50.0	48.3	
32 2-Methyl-2-propanol	59	2.119	2.119	0.000	99	65273	500.0	465.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.189	2.189	0.000	99	316509	500.0	472.1	
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	99	257454	50.0	47.6	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	376304	50.0	46.1	
36 Hexane	57	2.336	2.336	0.000	89	280301	50.0	49.4	
37 1,1-Dichloroethane	63	2.423	2.423	0.000	96	341459	50.0	46.7	
39 Vinyl acetate	43	2.445	2.445	0.000	98	658082	100.0	96.6	
38 Isopropyl ether	45	2.451	2.451	0.000	82	510367	50.0	48.0	
40 2-Chloro-1,3-butadiene	53	2.472	2.472	0.000	91	291336	50.0	47.8	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	96	452224	50.0	46.1	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	76	320084	50.0	50.6	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	305903	50.0	47.2	
44 2-Butanone (MEK)	72	2.766	2.766	0.000	98	55305	250.0	242.4	
45 Ethyl acetate	43	2.788	2.788	0.000	98	166067	100.0	96.4	
46 Propionitrile	54	2.799	2.799	0.000	99	126358	500.0	514.8	
47 Methacrylonitrile	41	2.886	2.886	0.000	90	524944	500.0	472.8	
48 Chlorobromomethane	130	2.886	2.886	0.000	76	128171	50.0	47.8	
50 Chloroform	83	2.924	2.924	0.000	92	368993	50.0	49.9	
49 Tetrahydrofuran	42	2.930	2.930	0.000	85	47158	100.0	91.2	
51 1,1,1-Trichloroethane	97	3.044	3.044	0.000	98	336134	50.0	47.7	
53 Cyclohexane	56	3.077	3.077	0.000	87	342833	50.0	48.2	
55 Carbon tetrachloride	117	3.142	3.142	0.000	96	302944	50.0	48.7	
54 1,1-Dichloropropene	75	3.142	3.142	0.000	98	288952	50.0	48.3	
56 Isobutyl alcohol	43	3.224	3.224	0.000	94	72284	1250.0	1198.7	
57 Benzene	78	3.273	3.273	0.000	95	864945	50.0	48.9	
58 t-Amyl alcohol	59	3.283	3.283	0.000	76	52099	500.0	423.6	
59 1,2-Dichloroethane	62	3.283	3.283	0.000	98	211464	50.0	45.6	
60 Tert-amyl methyl ether	73	3.343	3.343	0.000	97	394715	50.0	45.3	
61 n-Heptane	43	3.425	3.425	0.000	88	256429	50.0	51.7	
62 n-Butanol	56	3.665	3.665	0.000	86	49475	1250.0	1218.3	
63 Trichloroethene	130	3.686	3.686	0.000	97	244736	50.0	47.3	
64 Ethyl acrylate	55	3.763	3.763	0.000	98	112927	50.0	50.0	
65 Methylcyclohexane	83	3.812	3.812	0.000	85	385986	50.0	48.4	
66 1,2-Dichloropropane	63	3.844	3.844	0.000	95	190939	50.0	47.4	
67 Methyl methacrylate	41	3.920	3.920	0.000	87	165577	100.0	94.6	
68 Dibromomethane	93	3.926	3.926	0.000	91	93098	50.0	46.6	
69 1,4-Dioxane	88	3.958	3.958	0.000	90	17361	1000.0	1125.2	
71 Dichlorobromomethane	83	4.029	4.029	0.000	99	255962	50.0	48.3	
72 2-Nitropropane	43	4.198	4.198	0.000	97	47356	100.0	91.8	
73 2-Chloroethyl vinyl ether	63	4.247	4.247	0.000	92	66530	50.0	44.6	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	98	296326	50.0	51.2	
75 4-Methyl-2-pentanone (MIBK)	58	4.481	4.481	0.000	94	170647	250.0	248.3	
76 Toluene	91	4.606	4.606	0.000	98	952434	50.0	49.2	
77 trans-1,3-Dichloropropene	75	4.775	4.775	0.000	90	225903	50.0	51.0	
78 Ethyl methacrylate	69	4.851	4.851	0.000	87	159914	50.0	48.7	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	134020	50.0	47.4	
80 Tetrachloroethene	166	5.025	5.025	0.000	98	254732	50.0	46.9	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	86	230531	50.0	49.2	
82 2-Hexanone	58	5.134	5.134	0.000	93	156698	250.0	282.1	
83 Chlorodibromomethane	127	5.232	5.232	0.000	90	129625	50.0	53.5	
84 n-Butyl acetate	43	5.238	5.238	0.000	97	118872	50.0	53.7	
85 Ethylene Dibromide	107	5.330	5.330	0.000	99	128045	50.0	50.5	
86 1-Chlorohexane	91	5.717	5.717	0.000	93	308818	50.0	50.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.739	5.739	0.000	97	608733	50.0	49.7	
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	209696	50.0	51.1	
89 Ethylbenzene	91	5.831	5.831	0.000	97	1024035	50.0	52.9	
90 m-Xylene & p-Xylene	91	5.934	5.934	0.000	0	800416	50.0	52.9	
91 o-Xylene	91	6.277	6.277	0.000	96	825514	50.0	54.9	
92 Styrene	104	6.294	6.294	0.000	94	663828	50.0	55.5	
93 Bromoform	173	6.457	6.457	0.000	98	87028	50.0	52.5	
94 Isopropylbenzene	105	6.609	6.609	0.000	95	1033392	50.0	54.8	
95 Cyclohexanone	55	6.707	6.707	0.000	90	29962	500.0	494.2	
96 Bromobenzene	77	6.876	6.876	0.000	90	319086	50.0	51.2	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	133969	50.0	50.7	
98 1,2,3-Trichloropropane	110	6.925	6.925	0.000	81	41025	50.0	49.4	
99 trans-1,4-Dichloro-2-butene	53	6.952	6.952	0.000	82	31411	50.0	55.0	
100 N-Propylbenzene	91	6.991	6.991	0.000	98	1202958	50.0	55.9	
101 2-Chlorotoluene	91	7.061	7.061	0.000	98	698230	50.0	52.3	
102 1,3,5-Trimethylbenzene	105	7.159	7.159	0.000	94	889501	50.0	56.3	
103 4-Chlorotoluene	91	7.165	7.165	0.000	98	835760	50.0	54.4	
104 tert-Butylbenzene	119	7.453	7.453	0.000	92	749073	50.0	54.8	
106 1,2,4-Trimethylbenzene	105	7.502	7.502	0.000	97	894138	50.0	56.5	
107 sec-Butylbenzene	105	7.660	7.660	0.000	94	1117005	50.0	56.4	
108 1,3-Dichlorobenzene	146	7.758	7.758	0.000	98	481398	50.0	52.7	
109 4-Isopropyltoluene	119	7.807	7.807	0.000	96	986773	50.0	56.2	
110 1,4-Dichlorobenzene	146	7.845	7.845	0.000	95	494949	50.0	50.1	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	99	862984	50.0	53.9	
112 Benzyl chloride	91	7.981	7.981	0.000	98	255248	50.0	51.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	98	429668	50.0	51.8	
114 n-Butylbenzene	91	8.199	8.199	0.000	97	838024	50.0	60.2	
115 1,2-Dibromo-3-Chloropropan	157	8.950	8.950	0.000	91	24328	50.0	50.6	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	331396	50.0	54.5	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	93	254480	50.0	54.5	
118 Hexachlorobutadiene	225	9.979	9.979	0.000	97	125596	50.0	50.4	
119 Naphthalene	128	10.055	10.055	0.000	96	390033	50.0	50.3	
120 1,2,3-Trichlorobenzene	180	10.349	10.349	0.000	96	197058	50.0	53.7	
S 134 Xylenes, Total	1				0		100.0	107.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	102.2	
S 137 1,2-Dichloroethene, Total	1				0		100.0	94.8	
S 138 Trihalomethanes, Total	1				0		200.0	204.2	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

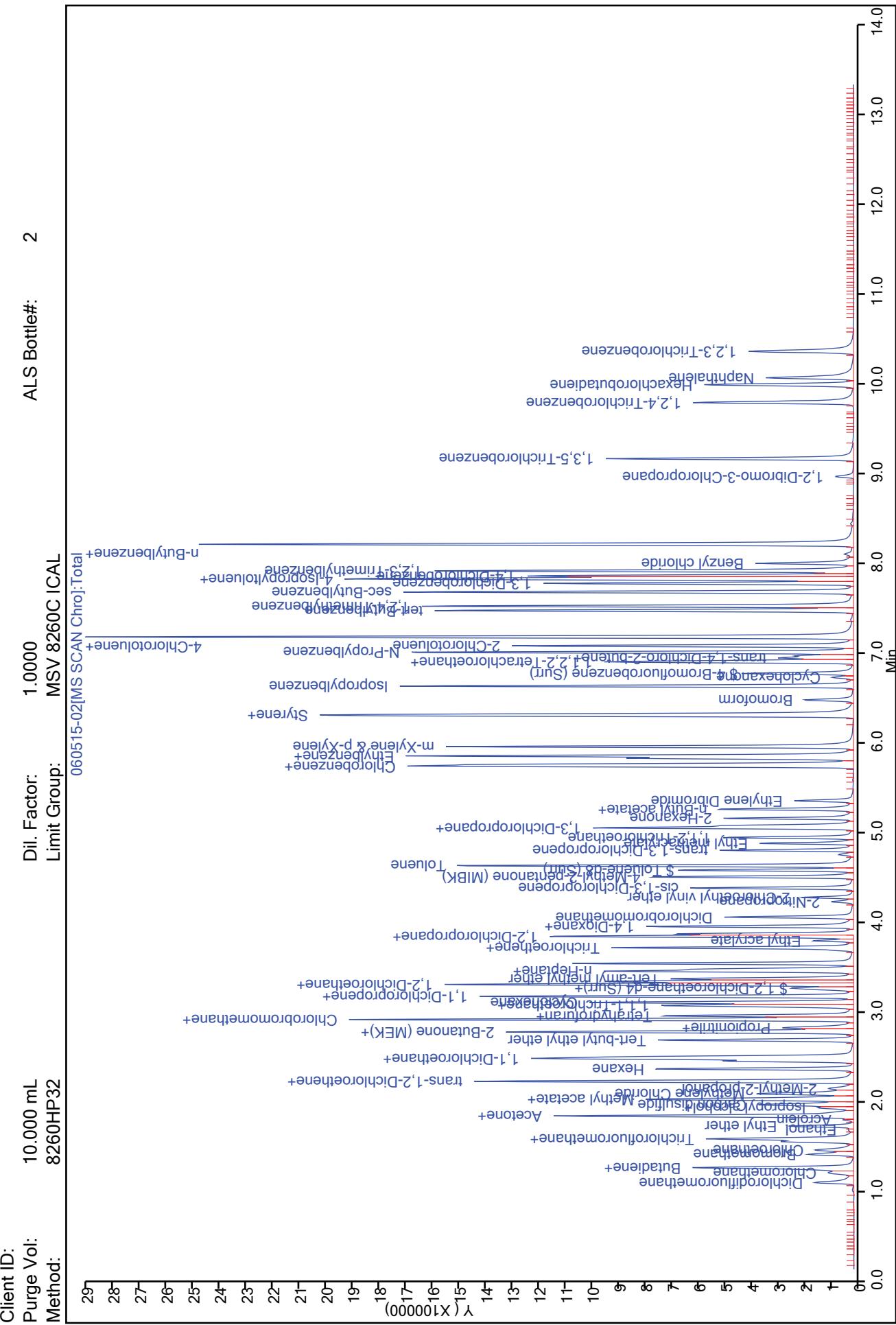
**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 08-Jun-2015 13:00:21

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\06  
Injection Date: 05-Jun-2015 11:19:30  
Lims ID: CCVIS  
TestAmerica Nashville  
Instrument ID: HP3



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 490-254074/2 Calibration Date: 06/06/2015 00:03  
Instrument ID: HP32 Calib Start Date: 03/13/2015 11:26  
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/13/2015 14:31  
Lab File ID: 060515-29.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3-Chloro-1-propene	Ave	0.1558	0.2414	0.1000		50.0	55.0*	20.0

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-29.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 06-Jun-2015 00:03:30 ALS Bottle#: 29 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 490-0056110-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:41:32 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:41:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	421164	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.712	0.000	84	316061	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.824	0.000	93	174414	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	93	100433	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.241	0.000	0	87093	25.0	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	417338	25.0	26.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.752	0.000	95	143022	25.0	27.7	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	225354	50.0	47.1	
11 Chloromethane	50	1.177	1.177	0.000	98	176005	50.0	42.7	
12 Vinyl chloride	62	1.216	1.216	0.000	98	232920	50.0	49.1	
13 Butadiene	54	1.232	1.232	0.000	89	214070	50.0	50.7	
14 Bromomethane	96	1.379	1.379	0.000	90	140377	50.0	41.0	
15 Chloroethane	64	1.428	1.428	0.000	99	154645	50.0	51.3	
16 Dichlorofluoromethane	67	1.526	1.526	0.000	97	379686	50.0	50.0	
17 Trichlorofluoromethane	101	1.553	1.553	0.000	98	359377	50.0	45.3	
18 Ethanol	45	1.651	1.651	0.000	96	15797	2000.0	2086.7	
19 Ethyl ether	59	1.695	1.695	0.000	88	128406	50.0	48.2	
20 Acrolein	56	1.771	1.771	0.000	99	35655	125.0	115.2	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	93	213967	50.0	44.6	
22 1,1-Dichloroethene	96	1.814	1.814	0.000	96	207253	50.0	47.0	
23 Acetone	58	1.842	1.842	0.000	99	36919	250.0	235.5	
24 Iodomethane	142	1.896	1.896	0.000	98	181379	50.0	28.9	
25 Isopropyl alcohol	45	1.912	1.912	0.000	99	38495	500.0	448.4	
26 Carbon disulfide	76	1.934	1.934	0.000	99	492771	50.0	42.4	
28 Acetonitrile	41	1.994	1.994	0.000	75	358241	500.0	481.5	
29 3-Chloro-1-propene	76	1.994	1.994	0.000	93	203330	NC	NC	
30 Methyl acetate	43	2.005	2.005	0.000	97	351783	250.0	238.5	
31 Methylene Chloride	84	2.059	2.059	0.000	87	210829	50.0	49.2	
32 2-Methyl-2-propanol	59	2.114	2.114	0.000	99	69244	500.0	456.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.190	2.190	0.000	99	346893	500.0	478.5	
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	97	274581	50.0	46.9	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	415803	50.0	47.1	
36 Hexane	57	2.337	2.337	0.000	89	277964	50.0	45.3	
37 1,1-Dichloroethane	63	2.424	2.424	0.000	96	369860	50.0	46.8	
39 Vinyl acetate	43	2.446	2.446	0.000	97	656427	100.0	89.1	
38 Isopropyl ether	45	2.451	2.451	0.000	83	565622	50.0	49.2	
40 2-Chloro-1,3-butadiene	53	2.473	2.473	0.000	90	311012	50.0	47.2	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	97	504621	50.0	47.6	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	72	305090	50.0	44.6	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	317655	50.0	45.4	
44 2-Butanone (MEK)	72	2.762	2.762	0.000	98	58962	250.0	239.0	
45 Ethyl acetate	43	2.789	2.789	0.000	99	169407	100.0	91.0	
46 Propionitrile	54	2.800	2.800	0.000	99	126060	500.0	475.0	
47 Methacrylonitrile	41	2.881	2.881	0.000	91	553442	500.0	461.0	
48 Chlorobromomethane	130	2.887	2.887	0.000	79	132336	50.0	45.6	
50 Chloroform	83	2.930	2.930	0.000	91	382713	50.0	47.9	
49 Tetrahydrofuran	42	2.930	2.930	0.000	39	49060	100.0	87.8	
51 1,1,1-Trichloroethane	97	3.045	3.045	0.000	97	344787	50.0	45.3	
53 Cyclohexane	56	3.077	3.077	0.000	87	361383	50.0	47.0	
54 1,1-Dichloropropene	75	3.143	3.143	0.000	96	302288	50.0	46.7	
55 Carbon tetrachloride	117	3.148	3.148	0.000	94	306219	50.0	45.5	
56 Isobutyl alcohol	43	3.219	3.219	0.000	94	71589	1250.0	1097.9	
57 Benzene	78	3.273	3.273	0.000	95	899693	50.0	47.0	
58 t-Amyl alcohol	59	3.284	3.284	0.000	70	54290	500.0	408.3	
59 1,2-Dichloroethane	62	3.284	3.284	0.000	97	217969	50.0	43.5	
60 Tert-amyl methyl ether	73	3.344	3.344	0.000	97	436370	50.0	46.3	
61 n-Heptane	43	3.426	3.426	0.000	89	230904	50.0	43.1	
62 n-Butanol	56	3.660	3.660	0.000	85	49353	1250.0	1123.9	
63 Trichloroethene	130	3.687	3.687	0.000	97	264627	50.0	47.3	
64 Ethyl acrylate	55	3.763	3.763	0.000	99	128134	50.0	52.5	
65 Methylcyclohexane	83	3.818	3.818	0.000	85	409865	50.0	47.5	
66 1,2-Dichloropropane	63	3.845	3.845	0.000	96	209526	50.0	48.1	
67 Methyl methacrylate	41	3.921	3.921	0.000	89	189860	100.0	100.4	
68 Dibromomethane	93	3.926	3.926	0.000	90	99138	50.0	45.9	
69 1,4-Dioxane	88	3.954	3.954	0.000	91	12801	1000.0	767.3	
71 Dichlorobromomethane	83	4.030	4.030	0.000	99	276503	50.0	48.3	
72 2-Nitropropane	43	4.204	4.204	0.000	98	52566	100.0	94.3	
73 2-Chloroethyl vinyl ether	63	4.248	4.248	0.000	91	76470	50.0	46.2	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	325169	50.0	50.6	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	196700	250.0	257.8	
76 Toluene	91	4.601	4.601	0.000	99	1018304	50.0	47.4	
77 trans-1,3-Dichloropropene	75	4.776	4.776	0.000	90	247107	50.0	50.3	
78 Ethyl methacrylate	69	4.852	4.852	0.000	87	183241	50.0	50.3	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	145433	50.0	46.3	
80 Tetrachloroethene	166	5.026	5.026	0.000	97	267549	50.0	44.3	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	87	250928	50.0	48.3	
82 2-Hexanone	58	5.129	5.129	0.000	97	164005	250.0	266.0	
83 Chlorodibromomethane	127	5.233	5.233	0.000	90	139862	50.0	52.0	
84 n-Butyl acetate	43	5.238	5.238	0.000	98	130253	50.0	54.4	
85 Ethylene Dibromide	107	5.331	5.331	0.000	99	138259	50.0	49.1	
86 1-Chlorohexane	91	5.717	5.717	0.000	92	329759	50.0	49.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.739	5.739	0.000	96	658436	50.0	48.4	
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	230620	50.0	50.7	
89 Ethylbenzene	91	5.832	5.832	0.000	97	1105776	50.0	51.5	
90 m-Xylene & p-Xylene	91	5.935	5.935	0.000	0	858470	50.0	51.1	
91 o-Xylene	91	6.278	6.278	0.000	96	887838	50.0	53.2	
92 Styrene	104	6.294	6.294	0.000	94	715271	50.0	53.9	
93 Bromoform	173	6.458	6.458	0.000	99	95238	50.0	51.7	
94 Isopropylbenzene	105	6.610	6.610	0.000	95	1110855	50.0	53.1	
95 Cyclohexanone	55	6.708	6.708	0.000	90	48791	500.0	743.9	E
96 Bromobenzene	77	6.877	6.877	0.000	90	343422	50.0	50.3	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	139800	50.0	48.3	
98 1,2,3-Trichloropropane	110	6.926	6.926	0.000	80	45405	50.0	50.0	
99 trans-1,4-Dichloro-2-butene	53	6.948	6.948	0.000	83	33655	50.0	53.8	
100 N-Propylbenzene	91	6.986	6.986	0.000	98	1268483	50.0	53.8	
101 2-Chlorotoluene	91	7.062	7.062	0.000	98	746793	50.0	51.1	
103 4-Chlorotoluene	91	7.160	7.160	0.000	98	888815	50.0	52.8	
102 1,3,5-Trimethylbenzene	105	7.160	7.160	0.000	95	944261	50.0	54.6	
104 tert-Butylbenzene	119	7.454	7.454	0.000	92	805889	50.0	53.9	
106 1,2,4-Trimethylbenzene	105	7.503	7.503	0.000	97	953752	50.0	55.0	
107 sec-Butylbenzene	105	7.661	7.661	0.000	94	1175931	50.0	54.3	
108 1,3-Dichlorobenzene	146	7.759	7.759	0.000	98	513299	50.0	51.3	
109 4-Isopropyltoluene	119	7.808	7.808	0.000	96	1037936	50.0	54.0	
110 1,4-Dichlorobenzene	146	7.846	7.846	0.000	95	522397	50.0	48.2	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	920043	50.0	52.5	
112 Benzyl chloride	91	7.982	7.982	0.000	98	227599	50.0	41.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	97	454564	50.0	50.0	
114 n-Butylbenzene	91	8.194	8.194	0.000	97	855842	50.0	56.1	
115 1,2-Dibromo-3-Chloropropan	157	8.951	8.951	0.000	92	27107	50.0	51.5	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	350230	50.0	52.6	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	267101	50.0	52.2	
118 Hexachlorobutadiene	225	9.980	9.980	0.000	97	132393	50.0	48.5	
119 Naphthalene	128	10.056	10.056	0.000	96	416354	50.0	49.0	
120 1,2,3-Trichlorobenzene	180	10.350	10.350	0.000	95	199456	50.0	49.6	
S 134 Xylenes, Total	1				0		100.0	104.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.9	
S 137 1,2-Dichloroethene, Total	1				0		100.0	92.3	
S 138 Trihalomethanes, Total	1				0		200.0	199.9	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 10-Jun-2015 09:41:33

Chrom Revision: 2.2 14-May-2015 11:41:56

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-254074/2

Calibration Date: 06/06/2015 00:03

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-29.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2840	0.2675	0.1000	47.1	50.0	-5.8	20.0
Chloromethane	Lin2		0.2090	0.1000	42.7	50.0	-14.6	20.0
Vinyl chloride	Ave	0.2813	0.2765	0.1000	49.1	50.0	-1.7	20.0
Butadiene	Ave	0.2505	0.2541	0.1000	50.7	50.0	1.5	20.0
Bromomethane	Ave	0.2034	0.1667	0.1000	41.0	50.0	-18.1	20.0
Chloroethane	Lin2		0.1836	0.1000	51.3	50.0	2.6	20.0
Dichlorofluoromethane	Ave	0.4503	0.4508	0.1000	50.0	50.0	0.1	20.0
Trichlorofluoromethane	Ave	0.4711	0.4267	0.1000	45.3	50.0	-9.4	20.0
Ethanol	Lin2	0.0006	0.0005*	0.0010	2090	2000	4.3	20.0
Ethyl ether	Ave	0.1582	0.1524	0.1000	48.2	50.0	-3.6	20.0
Acrolein	Ave	0.0184	0.0169	0.0100	115	125	-7.8	20.0
Freon-113	Ave	0.2847	0.2540	0.1000	44.6	50.0	-10.8	20.0
1,1-Dichloroethene	Ave	0.2618	0.2461	0.1000	47.0	50.0	-6.0	20.0
Acetone	Lin2		0.0088*	0.0100	236	250	-5.8	20.0
Iodomethane	Ave	0.3726	0.2153	0.1000	28.9	50.0	-42.2*	20.0
Isopropyl alcohol	Lin2		0.0046	0.0010	448	500	-10.3	20.0
Carbon disulfide	Ave	0.6896	0.5850	0.1000	42.4	50.0	-15.2	20.0
Acetonitrile	Ave	0.0442	0.0425	0.0010	481	500	-3.7	20.0
Methyl acetate	Ave	0.0876	0.0835*	0.1000	238	250	-4.6	20.0
Methylene Chloride	Lin2		0.2503	0.0100	49.2	50.0	-1.7	20.0
2-Methyl-2-propanol	Ave	0.0090	0.0082	0.0010	456	500	-8.8	20.0
Acrylonitrile	Ave	0.0430	0.0412	0.0100	478	500	-4.3	20.0
Methyl tert-butyl ether	Ave	0.5243	0.4936	0.1000	47.1	50.0	-5.9	20.0
trans-1,2-Dichloroethene	Ave	0.3474	0.3260	0.1000	46.9	50.0	-6.2	20.0
Hexane	Ave	0.3640	0.3300	0.1000	45.3	50.0	-9.3	20.0
1,1-Dichloroethane	Ave	0.4689	0.4391	0.2000	46.8	50.0	-6.3	20.0
Vinyl acetate	Ave	0.4374	0.3897	0.1000	89.1	100	-10.9	20.0
Isopropyl ether	Ave	0.6830	0.6715	0.1000	49.2	50.0	-1.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3909	0.3692	0.1000	47.2	50.0	-5.5	20.0
Tert-butyl ethyl ether	Ave	0.6290	0.5991	0.1000	47.6	50.0	-4.8	20.0
2,2-Dichloropropane	Ave	0.4060	0.3622	0.1000	44.6	50.0	-10.8	20.0
cis-1,2-Dichloroethene	Ave	0.4157	0.3771	0.1000	45.4	50.0	-9.3	20.0
2-Butanone (MEK)	Ave	0.0146	0.0140	0.0100	239	250	-4.4	20.0
Ethyl acetate	Ave	0.1106	0.1006	0.0100	91.0	100	-9.0	20.0
Propionitrile	Ave	0.0158	0.0150	0.0100	475	500	-5.0	20.0
Chlorobromomethane	Ave	0.1721	0.1571	0.1000	45.6	50.0	-8.7	20.0
Chloroform	Lin2		0.4544	0.2000	47.9	50.0	-4.3	20.0
Tetrahydrofuran	Ave	0.0332	0.0291*	0.0500	87.8	100	-12.2	20.0
1,1,1-Trichloroethane	Ave	0.4519	0.4093	0.1000	45.3	50.0	-9.4	20.0
Cyclohexane	Ave	0.4568	0.4290	0.1000	47.0	50.0	-6.1	20.0
1,1-Dichloropropene	Ave	0.3841	0.3589	0.1000	46.7	50.0	-6.6	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-254074/2

Calibration Date: 06/06/2015 00:03

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-29.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3993	0.3635	0.1000	45.5	50.0	-8.9	20.0
Isobutyl alcohol	Ave	0.0039	0.0034	0.0010	1100	1250	-12.2	20.0
Benzene	Ave	1.135	1.068	0.5000	47.0	50.0	-5.9	20.0
1,2-Dichloroethane	Ave	0.2977	0.2588	0.1000	43.5	50.0	-13.1	20.0
t-Amyl alcohol	Ave	0.0079	0.0065	0.0010	408	500	-18.3	20.0
Tert-amyl methyl ether	Ave	0.5591	0.5181	0.1000	46.3	50.0	-7.3	20.0
n-Heptane	Ave	0.3183	0.2741	0.1000	43.1	50.0	-13.9	20.0
n-Butanol	Ave	0.0026	0.0023	0.0010	1120	1250	-10.1	20.0
Trichloroethene	Ave	0.3318	0.3142	0.2000	47.3	50.0	-5.3	20.0
Ethyl acrylate	Ave	0.1449	0.1521	0.1000	52.5	50.0	5.0	20.0
Methylcyclohexane	Ave	0.5124	0.4866	0.1000	47.5	50.0	-5.0	20.0
1,2-Dichloropropane	Ave	0.2587	0.2488	0.1000	48.1	50.0	-3.8	20.0
Methyl methacrylate	Ave	0.1123	0.1127	0.1000	100	100	0.4	20.0
Dibromomethane	Ave	0.1281	0.1177	0.0500	45.9	50.0	-8.1	20.0
1,4-Dioxane	Ave	0.0010	0.0008*	0.0010	767	1000	-23.3*	20.0
Dichlorobromomethane	Ave	0.3398	0.3283	0.2000	48.3	50.0	-3.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1310	0.1210	0.1000	46.2	50.0	-7.7	20.0
cis-1,3-Dichloropropene	Ave	0.5084	0.5144	0.2000	50.6	50.0	1.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0604	0.0622	0.0500	258	250	3.1	20.0
Toluene	Ave	1.699	1.611	0.4000	47.4	50.0	-5.2	20.0
trans-1,3-Dichloropropene	Ave	0.3887	0.3909	0.0100	50.3	50.0	0.6	20.0
Ethyl methacrylate	Ave	0.2881	0.2899	0.1000	50.3	50.0	0.6	20.0
1,1,2-Trichloroethane	Ave	0.2485	0.2301	0.1000	46.3	50.0	-7.4	20.0
Tetrachloroethene	Ave	0.4774	0.4233	0.2000	44.3	50.0	-11.3	20.0
1,3-Dichloropropane	Ave	0.4112	0.3970	0.1000	48.3	50.0	-3.5	20.0
2-Hexanone	Ave	0.0488	0.0519	0.0500	266	250	6.4	20.0
Chlorodibromomethane	Ave	0.2128	0.2213	0.1000	52.0	50.0	4.0	20.0
n-Butyl acetate	Ave	0.1420	0.1546	0.1000	54.4	50.0	8.9	20.0
1,2-Dibromoethane	Ave	0.2226	0.2187	0.1000	49.1	50.0	-1.8	20.0
Chlorobenzene	Ave	1.076	1.042	0.5000	48.4	50.0	-3.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3600	0.3648	0.1000	50.7	50.0	1.3	20.0
Ethylbenzene	Ave	1.700	1.749	0.1000	51.5	50.0	2.9	20.0
m-Xylene & p-Xylene	Ave	1.330	1.358	0.1000	51.1	50.0	2.1	20.0
o-Xylene	Ave	1.321	1.405	0.3000	53.2	50.0	6.3	20.0
Styrene	Ave	1.050	1.132	0.3000	53.9	50.0	7.8	20.0
Bromoform	Ave	0.1457	0.1507	0.0100	51.7	50.0	3.4	20.0
Isopropylbenzene	Ave	1.656	1.757	0.1000	53.1	50.0	6.1	20.0
Bromobenzene	Ave	0.9793	0.9845	0.1000	50.3	50.0	0.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4149	0.4008	0.3000	48.3	50.0	-3.4	20.0
1,2,3-Trichloropropane	Ave	0.1303	0.1302	0.1000	50.0	50.0	-0.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0897	0.0965*	0.1000	53.8	50.0	7.5	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 490-254074/2 Calibration Date: 06/06/2015 00:03

Instrument ID: HP32 Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/18/2015 20:46

Lab File ID: 060515-29.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	3.381	3.636	0.1000	53.8	50.0	7.6	20.0
2-Chlorotoluene	Ave	2.096	2.141	0.1000	51.1	50.0	2.1	20.0
1,3,5-Trimethylbenzene	Ave	2.479	2.707	0.1000	54.6	50.0	9.2	20.0
4-Chlorotoluene	Ave	2.411	2.548	0.1000	52.8	50.0	5.7	20.0
1,2,4-Trimethylbenzene	Ave	2.486	2.734	0.1000	55.0	50.0	10.0	20.0
sec-Butylbenzene	Ave	3.107	3.371	0.1000	54.3	50.0	8.5	20.0
1,3-Dichlorobenzene	Ave	1.434	1.472	0.6000	51.3	50.0	2.6	20.0
4-Isopropyltoluene	Ave	2.757	2.976	0.1000	54.0	50.0	7.9	20.0
1,4-Dichlorobenzene	Ave	1.552	1.498	0.5000	48.2	50.0	-3.5	20.0
1,2-Dichlorobenzene	Ave	1.303	1.303	0.4000	50.0	50.0	0.0	20.0
n-Butylbenzene	Ave	2.185	2.453	0.1000	56.1	50.0	12.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0754	0.0777	0.0100	51.5	50.0	3.0	20.0
1,3,5-Trichlorobenzene	Ave	0.9551	1.004	0.1000	52.6	50.0	5.1	20.0
1,2,4-Trichlorobenzene	Ave	0.7332	0.7657	0.2000	52.2	50.0	4.4	20.0
Hexachlorobutadiene	Ave	0.3914	0.3795	0.1000	48.5	50.0	-3.0	20.0
Naphthalene	Lin2		1.194	0.0100	49.0	50.0	-1.9	20.0
1,2,3-Trichlorobenzene	Ave	0.5760	0.5718	0.1000	49.6	50.0	-0.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2407	0.2385		24.8	25.0	-0.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2121	0.2068		24.4	25.0	-2.5	20.0
Toluene-d8 (Surr)	Ave	1.243	1.320		26.6	25.0	6.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7393	0.8200		27.7	25.0	10.9	20.0

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-29.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 06-Jun-2015 00:03:30 ALS Bottle#: 29 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 490-0056110-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:41:32 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:41:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	421164	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.712	0.000	84	316061	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.824	0.000	93	174414	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	93	100433	25.0	24.8	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.241	0.000	0	87093	25.0	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	417338	25.0	26.6	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.752	0.000	95	143022	25.0	27.7	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	225354	50.0	47.1	
11 Chloromethane	50	1.177	1.177	0.000	98	176005	50.0	42.7	
12 Vinyl chloride	62	1.216	1.216	0.000	98	232920	50.0	49.1	
13 Butadiene	54	1.232	1.232	0.000	89	214070	50.0	50.7	
14 Bromomethane	96	1.379	1.379	0.000	90	140377	50.0	41.0	
15 Chloroethane	64	1.428	1.428	0.000	99	154645	50.0	51.3	
16 Dichlorofluoromethane	67	1.526	1.526	0.000	97	379686	50.0	50.0	
17 Trichlorofluoromethane	101	1.553	1.553	0.000	98	359377	50.0	45.3	
18 Ethanol	45	1.651	1.651	0.000	96	15797	2000.0	2086.7	
19 Ethyl ether	59	1.695	1.695	0.000	88	128406	50.0	48.2	
20 Acrolein	56	1.771	1.771	0.000	99	35655	125.0	115.2	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	93	213967	50.0	44.6	
22 1,1-Dichloroethene	96	1.814	1.814	0.000	96	207253	50.0	47.0	
23 Acetone	58	1.842	1.842	0.000	99	36919	250.0	235.5	
24 Iodomethane	142	1.896	1.896	0.000	98	181379	50.0	28.9	
25 Isopropyl alcohol	45	1.912	1.912	0.000	99	38495	500.0	448.4	
26 Carbon disulfide	76	1.934	1.934	0.000	99	492771	50.0	42.4	
28 Acetonitrile	41	1.994	1.994	0.000	75	358241	500.0	481.5	
29 3-Chloro-1-propene	76	1.994	1.994	0.000	93	203330	NC	NC	
30 Methyl acetate	43	2.005	2.005	0.000	97	351783	250.0	238.5	
31 Methylene Chloride	84	2.059	2.059	0.000	87	210829	50.0	49.2	
32 2-Methyl-2-propanol	59	2.114	2.114	0.000	99	69244	500.0	456.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.190	2.190	0.000	99	346893	500.0	478.5	
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	97	274581	50.0	46.9	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	415803	50.0	47.1	
36 Hexane	57	2.337	2.337	0.000	89	277964	50.0	45.3	
37 1,1-Dichloroethane	63	2.424	2.424	0.000	96	369860	50.0	46.8	
39 Vinyl acetate	43	2.446	2.446	0.000	97	656427	100.0	89.1	
38 Isopropyl ether	45	2.451	2.451	0.000	83	565622	50.0	49.2	
40 2-Chloro-1,3-butadiene	53	2.473	2.473	0.000	90	311012	50.0	47.2	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	97	504621	50.0	47.6	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	72	305090	50.0	44.6	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	317655	50.0	45.4	
44 2-Butanone (MEK)	72	2.762	2.762	0.000	98	58962	250.0	239.0	
45 Ethyl acetate	43	2.789	2.789	0.000	99	169407	100.0	91.0	
46 Propionitrile	54	2.800	2.800	0.000	99	126060	500.0	475.0	
47 Methacrylonitrile	41	2.881	2.881	0.000	91	553442	500.0	461.0	
48 Chlorobromomethane	130	2.887	2.887	0.000	79	132336	50.0	45.6	
50 Chloroform	83	2.930	2.930	0.000	91	382713	50.0	47.9	
49 Tetrahydrofuran	42	2.930	2.930	0.000	39	49060	100.0	87.8	
51 1,1,1-Trichloroethane	97	3.045	3.045	0.000	97	344787	50.0	45.3	
53 Cyclohexane	56	3.077	3.077	0.000	87	361383	50.0	47.0	
54 1,1-Dichloropropene	75	3.143	3.143	0.000	96	302288	50.0	46.7	
55 Carbon tetrachloride	117	3.148	3.148	0.000	94	306219	50.0	45.5	
56 Isobutyl alcohol	43	3.219	3.219	0.000	94	71589	1250.0	1097.9	
57 Benzene	78	3.273	3.273	0.000	95	899693	50.0	47.0	
58 t-Amyl alcohol	59	3.284	3.284	0.000	70	54290	500.0	408.3	
59 1,2-Dichloroethane	62	3.284	3.284	0.000	97	217969	50.0	43.5	
60 Tert-amyl methyl ether	73	3.344	3.344	0.000	97	436370	50.0	46.3	
61 n-Heptane	43	3.426	3.426	0.000	89	230904	50.0	43.1	
62 n-Butanol	56	3.660	3.660	0.000	85	49353	1250.0	1123.9	
63 Trichloroethene	130	3.687	3.687	0.000	97	264627	50.0	47.3	
64 Ethyl acrylate	55	3.763	3.763	0.000	99	128134	50.0	52.5	
65 Methylcyclohexane	83	3.818	3.818	0.000	85	409865	50.0	47.5	
66 1,2-Dichloropropane	63	3.845	3.845	0.000	96	209526	50.0	48.1	
67 Methyl methacrylate	41	3.921	3.921	0.000	89	189860	100.0	100.4	
68 Dibromomethane	93	3.926	3.926	0.000	90	99138	50.0	45.9	
69 1,4-Dioxane	88	3.954	3.954	0.000	91	12801	1000.0	767.3	
71 Dichlorobromomethane	83	4.030	4.030	0.000	99	276503	50.0	48.3	
72 2-Nitropropane	43	4.204	4.204	0.000	98	52566	100.0	94.3	
73 2-Chloroethyl vinyl ether	63	4.248	4.248	0.000	91	76470	50.0	46.2	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	325169	50.0	50.6	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	196700	250.0	257.8	
76 Toluene	91	4.601	4.601	0.000	99	1018304	50.0	47.4	
77 trans-1,3-Dichloropropene	75	4.776	4.776	0.000	90	247107	50.0	50.3	
78 Ethyl methacrylate	69	4.852	4.852	0.000	87	183241	50.0	50.3	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	145433	50.0	46.3	
80 Tetrachloroethene	166	5.026	5.026	0.000	97	267549	50.0	44.3	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	87	250928	50.0	48.3	
82 2-Hexanone	58	5.129	5.129	0.000	97	164005	250.0	266.0	
83 Chlorodibromomethane	127	5.233	5.233	0.000	90	139862	50.0	52.0	
84 n-Butyl acetate	43	5.238	5.238	0.000	98	130253	50.0	54.4	
85 Ethylene Dibromide	107	5.331	5.331	0.000	99	138259	50.0	49.1	
86 1-Chlorohexane	91	5.717	5.717	0.000	92	329759	50.0	49.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.739	5.739	0.000	96	658436	50.0	48.4	
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	230620	50.0	50.7	
89 Ethylbenzene	91	5.832	5.832	0.000	97	1105776	50.0	51.5	
90 m-Xylene & p-Xylene	91	5.935	5.935	0.000	0	858470	50.0	51.1	
91 o-Xylene	91	6.278	6.278	0.000	96	887838	50.0	53.2	
92 Styrene	104	6.294	6.294	0.000	94	715271	50.0	53.9	
93 Bromoform	173	6.458	6.458	0.000	99	95238	50.0	51.7	
94 Isopropylbenzene	105	6.610	6.610	0.000	95	1110855	50.0	53.1	
95 Cyclohexanone	55	6.708	6.708	0.000	90	48791	500.0	743.9	E
96 Bromobenzene	77	6.877	6.877	0.000	90	343422	50.0	50.3	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	139800	50.0	48.3	
98 1,2,3-Trichloropropane	110	6.926	6.926	0.000	80	45405	50.0	50.0	
99 trans-1,4-Dichloro-2-butene	53	6.948	6.948	0.000	83	33655	50.0	53.8	
100 N-Propylbenzene	91	6.986	6.986	0.000	98	1268483	50.0	53.8	
101 2-Chlorotoluene	91	7.062	7.062	0.000	98	746793	50.0	51.1	
103 4-Chlorotoluene	91	7.160	7.160	0.000	98	888815	50.0	52.8	
102 1,3,5-Trimethylbenzene	105	7.160	7.160	0.000	95	944261	50.0	54.6	
104 tert-Butylbenzene	119	7.454	7.454	0.000	92	805889	50.0	53.9	
106 1,2,4-Trimethylbenzene	105	7.503	7.503	0.000	97	953752	50.0	55.0	
107 sec-Butylbenzene	105	7.661	7.661	0.000	94	1175931	50.0	54.3	
108 1,3-Dichlorobenzene	146	7.759	7.759	0.000	98	513299	50.0	51.3	
109 4-Isopropyltoluene	119	7.808	7.808	0.000	96	1037936	50.0	54.0	
110 1,4-Dichlorobenzene	146	7.846	7.846	0.000	95	522397	50.0	48.2	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	920043	50.0	52.5	
112 Benzyl chloride	91	7.982	7.982	0.000	98	227599	50.0	41.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	97	454564	50.0	50.0	
114 n-Butylbenzene	91	8.194	8.194	0.000	97	855842	50.0	56.1	
115 1,2-Dibromo-3-Chloropropan	157	8.951	8.951	0.000	92	27107	50.0	51.5	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	350230	50.0	52.6	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	267101	50.0	52.2	
118 Hexachlorobutadiene	225	9.980	9.980	0.000	97	132393	50.0	48.5	
119 Naphthalene	128	10.056	10.056	0.000	96	416354	50.0	49.0	
120 1,2,3-Trichlorobenzene	180	10.350	10.350	0.000	95	199456	50.0	49.6	
S 134 Xylenes, Total	1				0		100.0	104.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.9	
S 137 1,2-Dichloroethene, Total	1				0		100.0	92.3	
S 138 Trihalomethanes, Total	1				0		200.0	199.9	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 10-Jun-2015 09:41:33

Chrom Revision: 2.2 14-May-2015 11:41:56

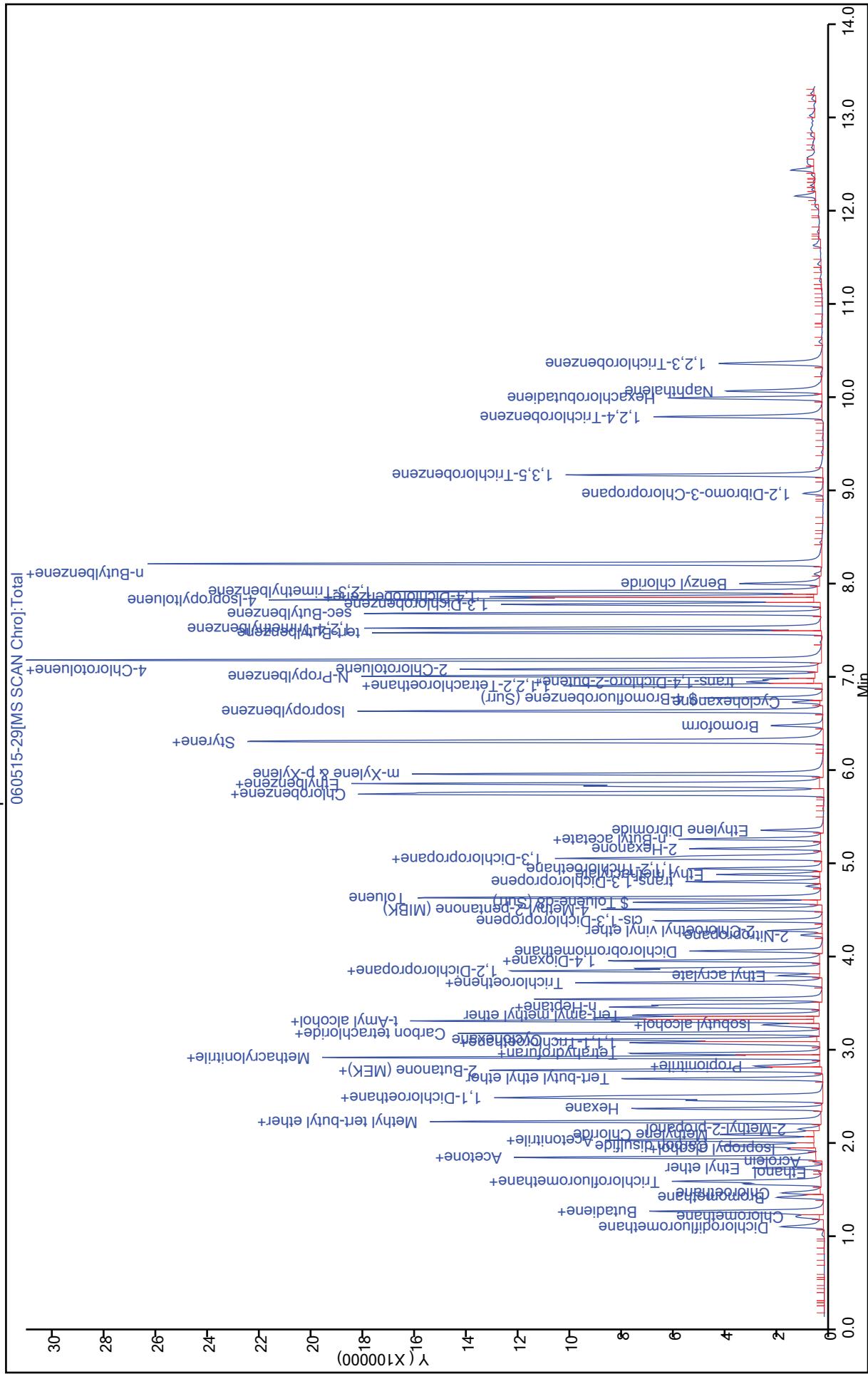
TestAmerica Nashville

\\ChromNA\Nashville\ChromData\HP32\20150605-56110.b\060515-29.D  
06-Jun-2015 00:03:30                          Instrument ID: HP32

Data File:  
Injection Data  
Jims ID:

Purge Vol: 10.000 mL  
Method: 8260HP32

DI. Factor: 1.0000      Limit Group: MSV 82260C ICAL      ALS Bottle#: 29



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 490-254379/2 Calibration Date: 06/08/2015 10:56  
Instrument ID: HP32 Calib Start Date: 03/13/2015 11:26  
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/13/2015 14:31  
Lab File ID: 060815-02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3-Chloro-1-propene	Ave	0.1558	0.2574	0.1000		50.0	65.2*	20.0

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-02.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-Jun-2015 10:56:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ccvis  
 Misc. Info.: 490-0056175-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:38:21 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:38:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	453174	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.714	0.000	84	342351	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	92	180731	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.025	0.000	94	102305	25.0	23.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.237	0.000	0	90639	25.0	23.6	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	417654	25.0	24.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.748	6.748	0.000	95	155367	25.0	29.1	
10 Dichlorodifluoromethane	85	1.065	1.065	0.000	99	263993	50.0	51.3	
11 Chloromethane	50	1.174	1.174	0.000	99	238159	50.0	53.7	
12 Vinyl chloride	62	1.212	1.212	0.000	98	292406	50.0	57.3	
13 Butadiene	54	1.229	1.229	0.000	88	272380	50.0	60.0	
14 Bromomethane	96	1.381	1.381	0.000	90	146616	50.0	39.8	
15 Chloroethane	64	1.430	1.430	0.000	99	182161	50.0	56.2	
16 Dichlorofluoromethane	67	1.523	1.523	0.000	97	437865	50.0	53.6	
17 Trichlorofluoromethane	101	1.555	1.555	0.000	98	397133	50.0	46.5	
18 Ethanol	45	1.653	1.653	0.000	99	21105	2000.0	2595.7	
19 Ethyl ether	59	1.691	1.691	0.000	88	147775	50.0	51.5	
20 Acrolein	56	1.768	1.768	0.000	98	43103	125.0	129.5	
21 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.806	0.000	94	240348	50.0	46.6	
22 1,1-Dichloroethene	96	1.811	1.811	0.000	97	236759	50.0	49.9	
23 Acetone	58	1.844	1.844	0.000	99	42927	250.0	254.6	
24 Iodomethane	142	1.898	1.898	0.000	97	169838	50.0	25.1	
25 Isopropyl alcohol	45	1.909	1.909	0.000	100	46506	500.0	503.8	
26 Carbon disulfide	76	1.931	1.931	0.000	100	608772	50.0	48.7	
28 Acetonitrile	41	1.991	1.991	0.000	92	425463	500.0	531.4	
29 3-Chloro-1-propene	76	1.991	1.991	0.000	93	233281	NC	NC	
30 Methyl acetate	43	2.002	2.002	0.000	97	391182	250.0	246.5	
31 Methylene Chloride	84	2.056	2.056	0.000	87	241800	50.0	52.4	
32 2-Methyl-2-propanol	59	2.116	2.116	0.000	99	78374	500.0	479.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.187	2.187	0.000	100	389820	500.0	499.7	
35 Methyl tert-butyl ether	73	2.198	2.198	0.000	94	446799	50.0	47.0	
34 trans-1,2-Dichloroethene	61	2.198	2.198	0.000	87	322802	50.0	51.3	
36 Hexane	57	2.334	2.334	0.000	89	348943	50.0	52.9	
37 1,1-Dichloroethane	63	2.421	2.421	0.000	96	429642	50.0	50.6	
39 Vinyl acetate	43	2.448	2.448	0.000	97	784743	100.0	99.0	
38 Isopropyl ether	45	2.454	2.454	0.000	91	632851	50.0	51.1	
40 2-Chloro-1,3-butadiene	53	2.470	2.470	0.000	90	357508	50.0	50.5	
41 Tert-butyl ethyl ether	59	2.655	2.655	0.000	97	563992	50.0	49.5	
42 cis-1,2-Dichloroethene	61	2.747	2.747	0.000	80	367323	50.0	48.8	
43 2,2-Dichloropropane	77	2.747	2.747	0.000	74	370720	50.0	50.4	
44 2-Butanone (MEK)	72	2.764	2.764	0.000	98	64640	250.0	243.5	
45 Ethyl acetate	43	2.786	2.786	0.000	99	204278	100.0	101.9	
46 Propionitrile	54	2.802	2.802	0.000	99	139237	500.0	487.6	
47 Methacrylonitrile	41	2.884	2.884	0.000	90	603821	500.0	467.5	
48 Chlorobromomethane	130	2.889	2.889	0.000	78	140059	50.0	44.9	
50 Chloroform	83	2.927	2.927	0.000	92	417125	50.0	48.5	
49 Tetrahydrofuran	42	2.927	2.927	0.000	70	54105	100.0	90.0	
51 1,1,1-Trichloroethane	97	3.041	3.041	0.000	98	365613	50.0	44.6	
53 Cyclohexane	56	3.074	3.074	0.000	87	411639	50.0	49.7	
55 Carbon tetrachloride	117	3.145	3.145	0.000	90	322357	50.0	44.5	
54 1,1-Dichloropropene	75	3.145	3.145	0.000	97	340546	50.0	48.9	
56 Isobutyl alcohol	43	3.221	3.221	0.000	95	80631	1250.0	1149.3	
57 Benzene	78	3.275	3.275	0.000	95	1011183	50.0	49.1	
58 t-Amyl alcohol	59	3.281	3.281	0.000	67	62090	500.0	433.9	
59 1,2-Dichloroethane	62	3.286	3.286	0.000	98	238551	50.0	44.2	
60 Tert-amyl methyl ether	73	3.341	3.341	0.000	98	476929	50.0	47.1	
61 n-Heptane	43	3.422	3.422	0.000	92	295034	50.0	51.1	
62 n-Butanol	56	3.662	3.662	0.000	84	57322	1250.0	1213.2	
63 Trichloroethene	130	3.689	3.689	0.000	98	275270	50.0	45.8	
64 Ethyl acrylate	55	3.765	3.765	0.000	98	131834	50.0	50.2	
65 Methylcyclohexane	83	3.814	3.814	0.000	86	432203	50.0	46.5	
66 1,2-Dichloropropane	63	3.842	3.842	0.000	96	228565	50.0	48.7	
68 Dibromomethane	93	3.923	3.923	0.000	93	101174	50.0	43.6	
67 Methyl methacrylate	41	3.923	3.923	0.000	89	192522	100.0	94.6	
69 1,4-Dioxane	88	3.956	3.956	0.000	92	20009	1000.0	1114.6	
71 Dichlorobromomethane	83	4.027	4.027	0.000	100	288382	50.0	46.8	
72 2-Nitropropane	43	4.201	4.201	0.000	97	52389	100.0	87.3	
73 2-Chloroethyl vinyl ether	63	4.250	4.250	0.000	91	78711	50.0	43.9	
74 cis-1,3-Dichloropropene	75	4.353	4.353	0.000	97	343776	50.0	49.4	
75 4-Methyl-2-pentanone (MIBK)	58	4.478	4.478	0.000	94	192065	250.0	232.4	
76 Toluene	91	4.604	4.604	0.000	99	1063348	50.0	45.7	
77 trans-1,3-Dichloropropene	75	4.772	4.772	0.000	91	257310	50.0	48.3	
78 Ethyl methacrylate	69	4.854	4.854	0.000	87	184495	50.0	46.8	
79 1,1,2-Trichloroethane	97	4.919	4.919	0.000	90	144472	50.0	42.4	
80 Tetrachloroethene	166	5.028	5.028	0.000	97	274240	50.0	42.0	
81 1,3-Dichloropropane	76	5.050	5.050	0.000	87	272544	50.0	48.4	
82 2-Hexanone	58	5.132	5.132	0.000	93	187500	250.0	280.7	
83 Chlorodibromomethane	127	5.230	5.230	0.000	90	156140	50.0	53.6	
84 n-Butyl acetate	43	5.235	5.235	0.000	96	139537	50.0	54.2	
85 Ethylene Dibromide	107	5.328	5.328	0.000	99	153606	50.0	50.4	
86 1-Chlorohexane	91	5.720	5.720	0.000	93	378949	50.0	52.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.736	5.736	0.000	96	740462	50.0	50.2	
88 1,1,1,2-Tetrachloroethane	131	5.807	5.807	0.000	96	252984	50.0	51.3	
89 Ethylbenzene	91	5.828	5.828	0.000	97	1271350	50.0	54.6	
90 m-Xylene & p-Xylene	91	5.932	5.932	0.000	0	990930	50.0	54.4	
91 o-Xylene	91	6.280	6.280	0.000	96	1006181	50.0	55.6	
92 Styrene	104	6.297	6.297	0.000	95	800103	50.0	55.6	
93 Bromoform	173	6.454	6.454	0.000	98	100117	50.0	50.2	
94 Isopropylbenzene	105	6.612	6.612	0.000	95	1241841	50.0	54.8	
95 Cyclohexanone	55	6.705	6.705	0.000	89	51518	500.0	730.0	E
96 Bromobenzene	77	6.879	6.879	0.000	88	381047	50.0	53.8	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.890	0.000	94	156479	50.0	52.2	
98 1,2,3-Trichloropropane	110	6.928	6.928	0.000	26	48308	50.0	51.3	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.950	0.000	94	36881	50.0	56.9	
100 N-Propylbenzene	91	6.988	6.988	0.000	98	1434814	50.0	58.7	
101 2-Chlorotoluene	91	7.059	7.059	0.000	97	841903	50.0	55.6	
102 1,3,5-Trimethylbenzene	105	7.157	7.157	0.000	95	1041560	50.0	58.1	
103 4-Chlorotoluene	91	7.162	7.162	0.000	98	984892	50.0	56.5	
104 tert-Butylbenzene	119	7.456	7.456	0.000	92	880407	50.0	56.8	
106 1,2,4-Trimethylbenzene	105	7.505	7.505	0.000	97	1049562	50.0	58.4	
107 sec-Butylbenzene	105	7.663	7.663	0.000	94	1300065	50.0	57.9	
108 1,3-Dichlorobenzene	146	7.755	7.755	0.000	98	550099	50.0	53.1	
109 4-Isopropyltoluene	119	7.804	7.804	0.000	96	1124643	50.0	56.4	
110 1,4-Dichlorobenzene	146	7.843	7.843	0.000	95	555510	50.0	49.5	
111 1,2,3-Trimethylbenzene	105	7.897	7.897	0.000	98	998731	50.0	54.9	
112 Benzyl chloride	91	7.984	7.984	0.000	98	292564	50.0	49.1	
113 1,2-Dichlorobenzene	146	8.191	8.191	0.000	98	476668	50.0	50.6	
114 n-Butylbenzene	91	8.196	8.196	0.000	97	943151	50.0	59.7	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.953	0.000	92	28117	50.0	51.6	
116 1,3,5-Trichlorobenzene	180	9.149	9.149	0.000	98	364978	50.0	52.9	
117 1,2,4-Trichlorobenzene	180	9.780	9.780	0.000	94	273014	50.0	51.5	
118 Hexachlorobutadiene	225	9.976	9.976	0.000	97	138185	50.0	48.8	
119 Naphthalene	128	10.053	10.053	0.000	96	430156	50.0	48.9	
120 1,2,3-Trichlorobenzene	180	10.352	10.352	0.000	96	206872	50.0	49.7	
S 137 1,2-Dichloroethene, Total	1				0		100.0	100.0	
S 138 Trihalomethanes, Total	1				0		200.0	199.1	
S 134 Xylenes, Total	1				0		100.0	110.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	97.7	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

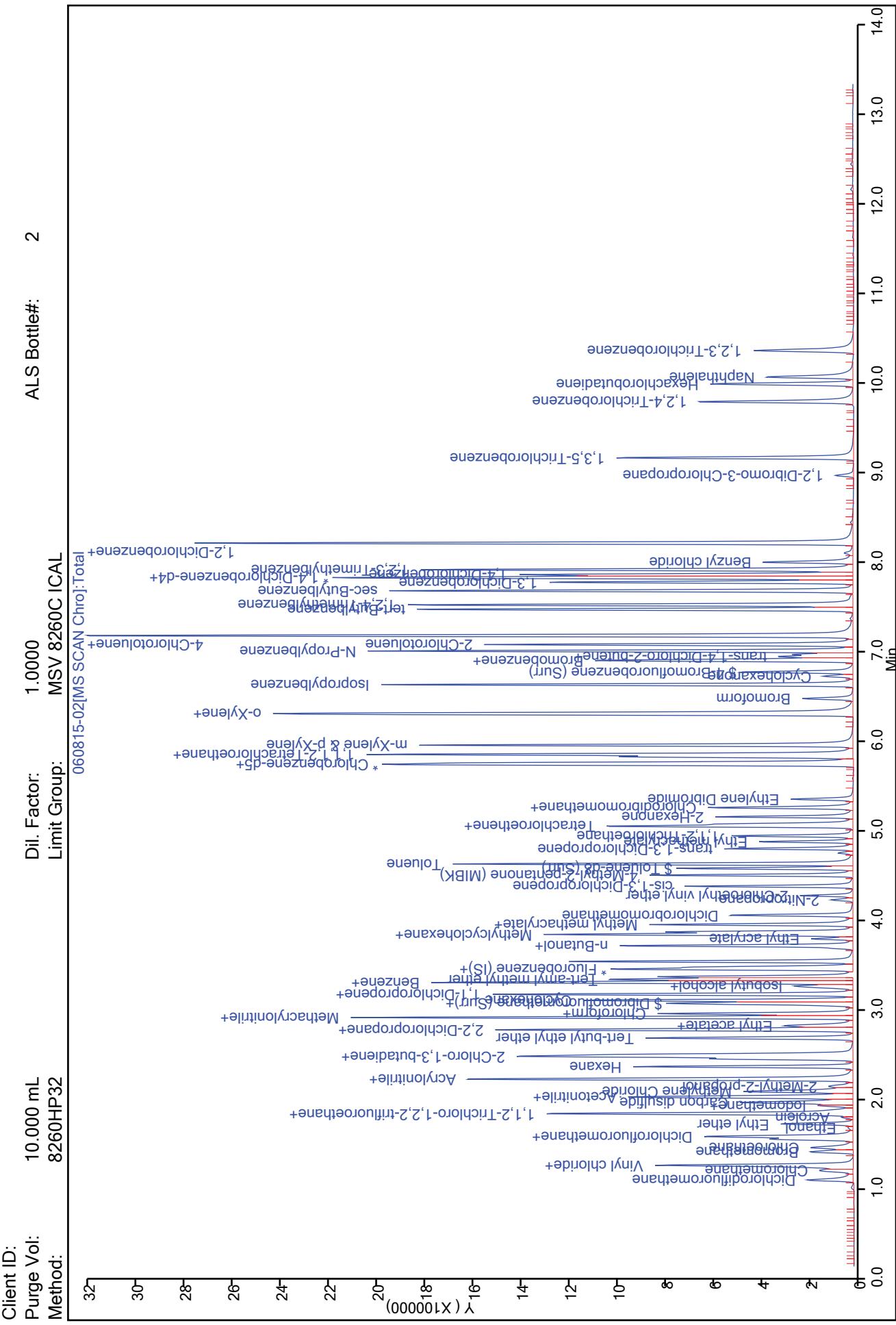
### Reagents:

V1_gases_I_00108	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:38:22

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32120150608-56175.b\\06  
Injection Date: 08-Jun-2015 10:56:30  
Lims ID: CCV1S  
Instrument ID: HP3  
TestAmerica Nashville



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-254379/2

Calibration Date: 06/08/2015 10:56

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060815-02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2840	0.2913	0.1000	51.3	50.0	2.6	20.0
Chloromethane	Lin2		0.2628	0.1000	53.7	50.0	7.5	20.0
Vinyl chloride	Ave	0.2813	0.3226	0.1000	57.3	50.0	14.7	20.0
Butadiene	Ave	0.2505	0.3005	0.1000	60.0	50.0	20.0	20.0
Bromomethane	Ave	0.2034	0.1618	0.1000	39.8	50.0	-20.5*	20.0
Chloroethane	Lin2		0.2010	0.1000	56.2	50.0	12.4	20.0
Dichlorofluoromethane	Ave	0.4503	0.4831	0.1000	53.6	50.0	7.3	20.0
Trichlorofluoromethane	Ave	0.4711	0.4382	0.1000	46.5	50.0	-7.0	20.0
Ethanol	Lin2	0.0006	0.0006*	0.0010	2600	2000	29.8*	20.0
Ethyl ether	Ave	0.1582	0.1630	0.1000	51.5	50.0	3.1	20.0
Acrolein	Ave	0.0184	0.0190	0.0100	129	125	3.6	20.0
Freon-113	Ave	0.2847	0.2652	0.1000	46.6	50.0	-6.9	20.0
1,1-Dichloroethene	Ave	0.2618	0.2612	0.1000	49.9	50.0	-0.2	20.0
Acetone	Lin2		0.0095*	0.0100	255	250	1.8	20.0
Iodomethane	Ave	0.3726	0.1874	0.1000	25.1	50.0	-49.7*	20.0
Isopropyl alcohol	Lin2		0.0051	0.0010	504	500	0.8	20.0
Carbon disulfide	Ave	0.6896	0.6717	0.1000	48.7	50.0	-2.6	20.0
Acetonitrile	Ave	0.0442	0.0469	0.0010	531	500	6.3	20.0
Methyl acetate	Ave	0.0876	0.0863*	0.1000	246	250	-1.4	20.0
Methylene Chloride	Lin2		0.2668	0.0100	52.4	50.0	4.9	20.0
2-Methyl-2-propanol	Ave	0.0090	0.0087	0.0010	480	500	-4.0	20.0
Acrylonitrile	Ave	0.0430	0.0430	0.0100	500	500	-0.0	20.0
Methyl tert-butyl ether	Ave	0.5243	0.4930	0.1000	47.0	50.0	-6.0	20.0
trans-1,2-Dichloroethene	Ave	0.3474	0.3562	0.1000	51.3	50.0	2.5	20.0
Hexane	Ave	0.3640	0.3850	0.1000	52.9	50.0	5.8	20.0
1,1-Dichloroethane	Ave	0.4689	0.4740	0.2000	50.6	50.0	1.1	20.0
Vinyl acetate	Ave	0.4374	0.4329	0.1000	99.0	100	-1.0	20.0
Isopropyl ether	Ave	0.6830	0.6982	0.1000	51.1	50.0	2.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3909	0.3945	0.1000	50.5	50.0	0.9	20.0
Tert-butyl ethyl ether	Ave	0.6290	0.6223	0.1000	49.5	50.0	-1.1	20.0
2,2-Dichloropropane	Ave	0.4060	0.4090	0.1000	50.4	50.0	0.8	20.0
cis-1,2-Dichloroethene	Ave	0.4157	0.4053	0.1000	48.8	50.0	-2.5	20.0
2-Butanone (MEK)	Ave	0.0146	0.0143	0.0100	244	250	-2.6	20.0
Ethyl acetate	Ave	0.1106	0.1127	0.0100	102	100	1.9	20.0
Propionitrile	Ave	0.0158	0.0154	0.0100	488	500	-2.5	20.0
Chlorobromomethane	Ave	0.1721	0.1545	0.1000	44.9	50.0	-10.2	20.0
Chloroform	Lin2		0.4602	0.2000	48.5	50.0	-3.0	20.0
Tetrahydrofuran	Ave	0.0332	0.0299*	0.0500	90.0	100	-10.0	20.0
1,1,1-Trichloroethane	Ave	0.4519	0.4034	0.1000	44.6	50.0	-10.7	20.0
Cyclohexane	Ave	0.4568	0.4542	0.1000	49.7	50.0	-0.6	20.0
1,1-Dichloropropene	Ave	0.3841	0.3757	0.1000	48.9	50.0	-2.2	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Lab Sample ID: CCVIS 490-254379/2

Calibration Date: 06/08/2015 10:56

Instrument ID: HP32

Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 05/18/2015 20:46

Lab File ID: 060815-02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3993	0.3557	0.1000	44.5	50.0	-10.9	20.0
Isobutyl alcohol	Ave	0.0039	0.0036	0.0010	1150	1250	-8.1	20.0
Benzene	Ave	1.135	1.116	0.5000	49.1	50.0	-1.7	20.0
t-Amyl alcohol	Ave	0.0079	0.0069	0.0010	434	500	-13.2	20.0
1,2-Dichloroethane	Ave	0.2977	0.2632	0.1000	44.2	50.0	-11.6	20.0
Tert-amyl methyl ether	Ave	0.5591	0.5262	0.1000	47.1	50.0	-5.9	20.0
n-Heptane	Ave	0.3183	0.3255	0.1000	51.1	50.0	2.3	20.0
n-Butanol	Ave	0.0026	0.0025	0.0010	1210	1250	-2.9	20.0
Trichloroethene	Ave	0.3318	0.3037	0.2000	45.8	50.0	-8.5	20.0
Ethyl acrylate	Ave	0.1449	0.1455	0.1000	50.2	50.0	0.4	20.0
Methylcyclohexane	Ave	0.5124	0.4769	0.1000	46.5	50.0	-6.9	20.0
1,2-Dichloropropane	Ave	0.2587	0.2522	0.1000	48.7	50.0	-2.5	20.0
Dibromomethane	Ave	0.1281	0.1116	0.0500	43.6	50.0	-12.9	20.0
Methyl methacrylate	Ave	0.1123	0.1062	0.1000	94.6	100	-5.4	20.0
1,4-Dioxane	Ave	0.0010	0.0011	0.0010	1110	1000	11.5	20.0
Dichlorobromomethane	Ave	0.3398	0.3182	0.2000	46.8	50.0	-6.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1310	0.1150	0.1000	43.9	50.0	-12.3	20.0
cis-1,3-Dichloropropene	Ave	0.5084	0.5021	0.2000	49.4	50.0	-1.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0604	0.0561	0.0500	232	250	-7.0	20.0
Toluene	Ave	1.699	1.553	0.4000	45.7	50.0	-8.6	20.0
trans-1,3-Dichloropropene	Ave	0.3887	0.3758	0.0100	48.3	50.0	-3.3	20.0
Ethyl methacrylate	Ave	0.2881	0.2695	0.1000	46.8	50.0	-6.5	20.0
1,1,2-Trichloroethane	Ave	0.2485	0.2110	0.1000	42.4	50.0	-15.1	20.0
Tetrachloroethene	Ave	0.4774	0.4005	0.2000	42.0	50.0	-16.1	20.0
1,3-Dichloropropane	Ave	0.4112	0.3981	0.1000	48.4	50.0	-3.2	20.0
2-Hexanone	Ave	0.0488	0.0548	0.0500	281	250	12.3	20.0
Chlorodibromomethane	Ave	0.2128	0.2280	0.1000	53.6	50.0	7.2	20.0
n-Butyl acetate	Ave	0.1420	0.1540	0.1000	54.2	50.0	8.4	20.0
1,2-Dibromoethane	Ave	0.2226	0.2243	0.1000	50.4	50.0	0.8	20.0
Chlorobenzene	Ave	1.076	1.081	0.5000	50.2	50.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3600	0.3695	0.1000	51.3	50.0	2.6	20.0
Ethylbenzene	Ave	1.700	1.857	0.1000	54.6	50.0	9.2	20.0
m-Xylene & p-Xylene	Ave	1.330	1.447	0.1000	54.4	50.0	8.8	20.0
o-Xylene	Ave	1.321	1.470	0.3000	55.6	50.0	11.2	20.0
Styrene	Ave	1.050	1.169	0.3000	55.6	50.0	11.3	20.0
Bromoform	Ave	0.1457	0.1462	0.0100	50.2	50.0	0.4	20.0
Isopropylbenzene	Ave	1.656	1.814	0.1000	54.8	50.0	9.5	20.0
Bromobenzene	Ave	0.9793	1.054	0.1000	53.8	50.0	7.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4149	0.4329	0.3000	52.2	50.0	4.3	20.0
1,2,3-Trichloropropane	Ave	0.1303	0.1337	0.1000	51.3	50.0	2.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0897	0.1020	0.1000	56.9	50.0	13.7	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 490-254379/2 Calibration Date: 06/08/2015 10:56

Instrument ID: HP32 Calib Start Date: 05/18/2015 17:36

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/18/2015 20:46

Lab File ID: 060815-02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	3.381	3.969	0.1000	58.7	50.0	17.4	20.0
2-Chlorotoluene	Ave	2.096	2.329	0.1000	55.6	50.0	11.1	20.0
1,3,5-Trimethylbenzene	Ave	2.479	2.882	0.1000	58.1	50.0	16.2	20.0
4-Chlorotoluene	Ave	2.411	2.725	0.1000	56.5	50.0	13.0	20.0
1,2,4-Trimethylbenzene	Ave	2.486	2.904	0.1000	58.4	50.0	16.8	20.0
sec-Butylbenzene	Ave	3.107	3.597	0.1000	57.9	50.0	15.8	20.0
1,3-Dichlorobenzene	Ave	1.434	1.522	0.6000	53.1	50.0	6.1	20.0
4-Isopropyltoluene	Ave	2.757	3.111	0.1000	56.4	50.0	12.9	20.0
1,4-Dichlorobenzene	Ave	1.552	1.537	0.5000	49.5	50.0	-1.0	20.0
1,2-Dichlorobenzene	Ave	1.303	1.319	0.4000	50.6	50.0	1.2	20.0
n-Butylbenzene	Ave	2.185	2.609	0.1000	59.7	50.0	19.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0754	0.0778	0.0100	51.6	50.0	3.1	20.0
1,3,5-Trichlorobenzene	Ave	0.9551	1.010	0.1000	52.9	50.0	5.7	20.0
1,2,4-Trichlorobenzene	Ave	0.7332	0.7553	0.2000	51.5	50.0	3.0	20.0
Hexachlorobutadiene	Ave	0.3914	0.3823	0.1000	48.8	50.0	-2.3	20.0
Naphthalene	Lin2		1.190	0.0100	48.9	50.0	-2.2	20.0
1,2,3-Trichlorobenzene	Ave	0.5760	0.5723	0.1000	49.7	50.0	-0.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2407	0.2258		23.5	25.0	-6.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2121	0.2000		23.6	25.0	-5.7	20.0
Toluene-d8 (Surr)	Ave	1.243	1.220		24.5	25.0	-1.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7393	0.8597		29.1	25.0	16.3	20.0

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-02.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-Jun-2015 10:56:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: ccvis  
 Misc. Info.: 490-0056175-002  
 Operator ID: EML Instrument ID: HP32  
 Sublist: chrom-8260HP32\*sub14  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:38:21 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:38:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	453174	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.714	0.000	84	342351	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	92	180731	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.025	0.000	94	102305	25.0	23.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.237	0.000	0	90639	25.0	23.6	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	417654	25.0	24.5	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.748	6.748	0.000	95	155367	25.0	29.1	
10 Dichlorodifluoromethane	85	1.065	1.065	0.000	99	263993	50.0	51.3	
11 Chloromethane	50	1.174	1.174	0.000	99	238159	50.0	53.7	
12 Vinyl chloride	62	1.212	1.212	0.000	98	292406	50.0	57.3	
13 Butadiene	54	1.229	1.229	0.000	88	272380	50.0	60.0	
14 Bromomethane	96	1.381	1.381	0.000	90	146616	50.0	39.8	
15 Chloroethane	64	1.430	1.430	0.000	99	182161	50.0	56.2	
16 Dichlorofluoromethane	67	1.523	1.523	0.000	97	437865	50.0	53.6	
17 Trichlorofluoromethane	101	1.555	1.555	0.000	98	397133	50.0	46.5	
18 Ethanol	45	1.653	1.653	0.000	99	21105	2000.0	2595.7	
19 Ethyl ether	59	1.691	1.691	0.000	88	147775	50.0	51.5	
20 Acrolein	56	1.768	1.768	0.000	98	43103	125.0	129.5	
21 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.806	0.000	94	240348	50.0	46.6	
22 1,1-Dichloroethene	96	1.811	1.811	0.000	97	236759	50.0	49.9	
23 Acetone	58	1.844	1.844	0.000	99	42927	250.0	254.6	
24 Iodomethane	142	1.898	1.898	0.000	97	169838	50.0	25.1	
25 Isopropyl alcohol	45	1.909	1.909	0.000	100	46506	500.0	503.8	
26 Carbon disulfide	76	1.931	1.931	0.000	100	608772	50.0	48.7	
28 Acetonitrile	41	1.991	1.991	0.000	92	425463	500.0	531.4	
29 3-Chloro-1-propene	76	1.991	1.991	0.000	93	233281	NC	NC	
30 Methyl acetate	43	2.002	2.002	0.000	97	391182	250.0	246.5	
31 Methylene Chloride	84	2.056	2.056	0.000	87	241800	50.0	52.4	
32 2-Methyl-2-propanol	59	2.116	2.116	0.000	99	78374	500.0	479.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Acrylonitrile	53	2.187	2.187	0.000	100	389820	500.0	499.7	
35 Methyl tert-butyl ether	73	2.198	2.198	0.000	94	446799	50.0	47.0	
34 trans-1,2-Dichloroethene	61	2.198	2.198	0.000	87	322802	50.0	51.3	
36 Hexane	57	2.334	2.334	0.000	89	348943	50.0	52.9	
37 1,1-Dichloroethane	63	2.421	2.421	0.000	96	429642	50.0	50.6	
39 Vinyl acetate	43	2.448	2.448	0.000	97	784743	100.0	99.0	
38 Isopropyl ether	45	2.454	2.454	0.000	91	632851	50.0	51.1	
40 2-Chloro-1,3-butadiene	53	2.470	2.470	0.000	90	357508	50.0	50.5	
41 Tert-butyl ethyl ether	59	2.655	2.655	0.000	97	563992	50.0	49.5	
42 cis-1,2-Dichloroethene	61	2.747	2.747	0.000	80	367323	50.0	48.8	
43 2,2-Dichloropropane	77	2.747	2.747	0.000	74	370720	50.0	50.4	
44 2-Butanone (MEK)	72	2.764	2.764	0.000	98	64640	250.0	243.5	
45 Ethyl acetate	43	2.786	2.786	0.000	99	204278	100.0	101.9	
46 Propionitrile	54	2.802	2.802	0.000	99	139237	500.0	487.6	
47 Methacrylonitrile	41	2.884	2.884	0.000	90	603821	500.0	467.5	
48 Chlorobromomethane	130	2.889	2.889	0.000	78	140059	50.0	44.9	
50 Chloroform	83	2.927	2.927	0.000	92	417125	50.0	48.5	
49 Tetrahydrofuran	42	2.927	2.927	0.000	70	54105	100.0	90.0	
51 1,1,1-Trichloroethane	97	3.041	3.041	0.000	98	365613	50.0	44.6	
53 Cyclohexane	56	3.074	3.074	0.000	87	411639	50.0	49.7	
55 Carbon tetrachloride	117	3.145	3.145	0.000	90	322357	50.0	44.5	
54 1,1-Dichloropropene	75	3.145	3.145	0.000	97	340546	50.0	48.9	
56 Isobutyl alcohol	43	3.221	3.221	0.000	95	80631	1250.0	1149.3	
57 Benzene	78	3.275	3.275	0.000	95	1011183	50.0	49.1	
58 t-Amyl alcohol	59	3.281	3.281	0.000	67	62090	500.0	433.9	
59 1,2-Dichloroethane	62	3.286	3.286	0.000	98	238551	50.0	44.2	
60 Tert-amyl methyl ether	73	3.341	3.341	0.000	98	476929	50.0	47.1	
61 n-Heptane	43	3.422	3.422	0.000	92	295034	50.0	51.1	
62 n-Butanol	56	3.662	3.662	0.000	84	57322	1250.0	1213.2	
63 Trichloroethene	130	3.689	3.689	0.000	98	275270	50.0	45.8	
64 Ethyl acrylate	55	3.765	3.765	0.000	98	131834	50.0	50.2	
65 Methylcyclohexane	83	3.814	3.814	0.000	86	432203	50.0	46.5	
66 1,2-Dichloropropane	63	3.842	3.842	0.000	96	228565	50.0	48.7	
68 Dibromomethane	93	3.923	3.923	0.000	93	101174	50.0	43.6	
67 Methyl methacrylate	41	3.923	3.923	0.000	89	192522	100.0	94.6	
69 1,4-Dioxane	88	3.956	3.956	0.000	92	20009	1000.0	1114.6	
71 Dichlorobromomethane	83	4.027	4.027	0.000	100	288382	50.0	46.8	
72 2-Nitropropane	43	4.201	4.201	0.000	97	52389	100.0	87.3	
73 2-Chloroethyl vinyl ether	63	4.250	4.250	0.000	91	78711	50.0	43.9	
74 cis-1,3-Dichloropropene	75	4.353	4.353	0.000	97	343776	50.0	49.4	
75 4-Methyl-2-pentanone (MIBK)	58	4.478	4.478	0.000	94	192065	250.0	232.4	
76 Toluene	91	4.604	4.604	0.000	99	1063348	50.0	45.7	
77 trans-1,3-Dichloropropene	75	4.772	4.772	0.000	91	257310	50.0	48.3	
78 Ethyl methacrylate	69	4.854	4.854	0.000	87	184495	50.0	46.8	
79 1,1,2-Trichloroethane	97	4.919	4.919	0.000	90	144472	50.0	42.4	
80 Tetrachloroethene	166	5.028	5.028	0.000	97	274240	50.0	42.0	
81 1,3-Dichloropropane	76	5.050	5.050	0.000	87	272544	50.0	48.4	
82 2-Hexanone	58	5.132	5.132	0.000	93	187500	250.0	280.7	
83 Chlorodibromomethane	127	5.230	5.230	0.000	90	156140	50.0	53.6	
84 n-Butyl acetate	43	5.235	5.235	0.000	96	139537	50.0	54.2	
85 Ethylene Dibromide	107	5.328	5.328	0.000	99	153606	50.0	50.4	
86 1-Chlorohexane	91	5.720	5.720	0.000	93	378949	50.0	52.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Chlorobenzene	112	5.736	5.736	0.000	96	740462	50.0	50.2	
88 1,1,1,2-Tetrachloroethane	131	5.807	5.807	0.000	96	252984	50.0	51.3	
89 Ethylbenzene	91	5.828	5.828	0.000	97	1271350	50.0	54.6	
90 m-Xylene & p-Xylene	91	5.932	5.932	0.000	0	990930	50.0	54.4	
91 o-Xylene	91	6.280	6.280	0.000	96	1006181	50.0	55.6	
92 Styrene	104	6.297	6.297	0.000	95	800103	50.0	55.6	
93 Bromoform	173	6.454	6.454	0.000	98	100117	50.0	50.2	
94 Isopropylbenzene	105	6.612	6.612	0.000	95	1241841	50.0	54.8	
95 Cyclohexanone	55	6.705	6.705	0.000	89	51518	500.0	730.0	E
96 Bromobenzene	77	6.879	6.879	0.000	88	381047	50.0	53.8	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.890	0.000	94	156479	50.0	52.2	
98 1,2,3-Trichloropropane	110	6.928	6.928	0.000	26	48308	50.0	51.3	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.950	0.000	94	36881	50.0	56.9	
100 N-Propylbenzene	91	6.988	6.988	0.000	98	1434814	50.0	58.7	
101 2-Chlorotoluene	91	7.059	7.059	0.000	97	841903	50.0	55.6	
102 1,3,5-Trimethylbenzene	105	7.157	7.157	0.000	95	1041560	50.0	58.1	
103 4-Chlorotoluene	91	7.162	7.162	0.000	98	984892	50.0	56.5	
104 tert-Butylbenzene	119	7.456	7.456	0.000	92	880407	50.0	56.8	
106 1,2,4-Trimethylbenzene	105	7.505	7.505	0.000	97	1049562	50.0	58.4	
107 sec-Butylbenzene	105	7.663	7.663	0.000	94	1300065	50.0	57.9	
108 1,3-Dichlorobenzene	146	7.755	7.755	0.000	98	550099	50.0	53.1	
109 4-Isopropyltoluene	119	7.804	7.804	0.000	96	1124643	50.0	56.4	
110 1,4-Dichlorobenzene	146	7.843	7.843	0.000	95	555510	50.0	49.5	
111 1,2,3-Trimethylbenzene	105	7.897	7.897	0.000	98	998731	50.0	54.9	
112 Benzyl chloride	91	7.984	7.984	0.000	98	292564	50.0	49.1	
113 1,2-Dichlorobenzene	146	8.191	8.191	0.000	98	476668	50.0	50.6	
114 n-Butylbenzene	91	8.196	8.196	0.000	97	943151	50.0	59.7	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.953	0.000	92	28117	50.0	51.6	
116 1,3,5-Trichlorobenzene	180	9.149	9.149	0.000	98	364978	50.0	52.9	
117 1,2,4-Trichlorobenzene	180	9.780	9.780	0.000	94	273014	50.0	51.5	
118 Hexachlorobutadiene	225	9.976	9.976	0.000	97	138185	50.0	48.8	
119 Naphthalene	128	10.053	10.053	0.000	96	430156	50.0	48.9	
120 1,2,3-Trichlorobenzene	180	10.352	10.352	0.000	96	206872	50.0	49.7	
S 137 1,2-Dichloroethene, Total	1				0		100.0	100.0	
S 138 Trihalomethanes, Total	1				0		200.0	199.1	
S 134 Xylenes, Total	1				0		100.0	110.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	97.7	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

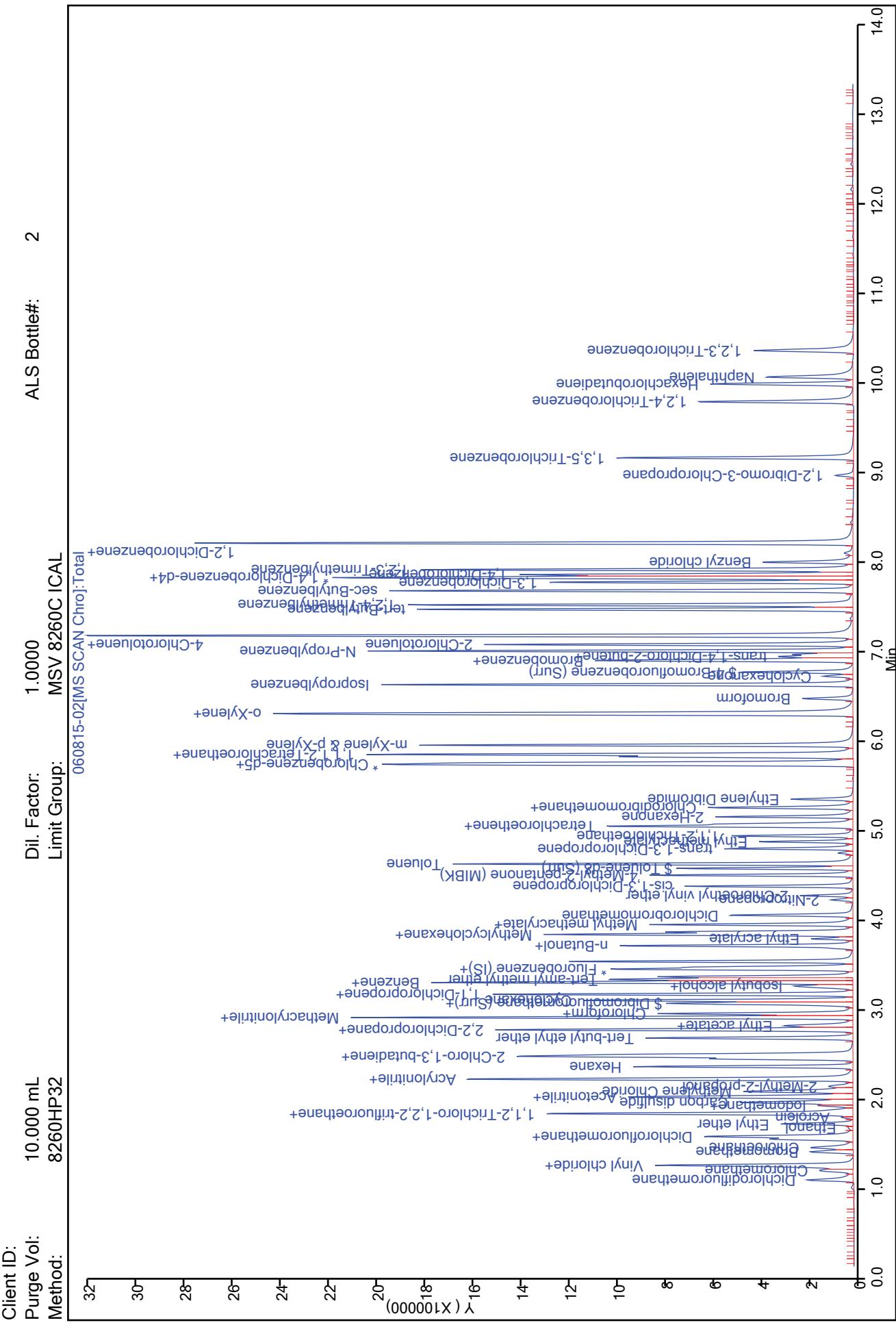
### Reagents:

V1_gases_I_00108	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:38:22

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32120150608-56175.b\\06  
Injection Date: 08-Jun-2015 10:56:30  
Lims ID: CCV1S  
Instrument ID: HP3  
TestAmerica Nashville



TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-17.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 18-May-2015 17:09:30 ALS Bottle#: 17 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Sample Info: BFB  
 Misc. Info.: 490-0055131-001  
 Operator ID: EML Instrument ID: HP32  
 Method: \\Nvlchrom\ChromData\HP32\20150518-55131.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 19-May-2015 11:39:02 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\Nvlchrom\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK022

First Level Reviewer: larsene Date: 18-May-2015 17:26:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	426577	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.715	0.000	84	324286	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	94	167405	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.031	3.031	0.000	94	103787	25.0	25.3	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.243	0.000	0	93118	25.0	25.7	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	405902	25.0	25.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.749	0.000	96	126020	25.0	25.5	
\$ 8 BFB	95	6.749	6.749	0.000	0	126020	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

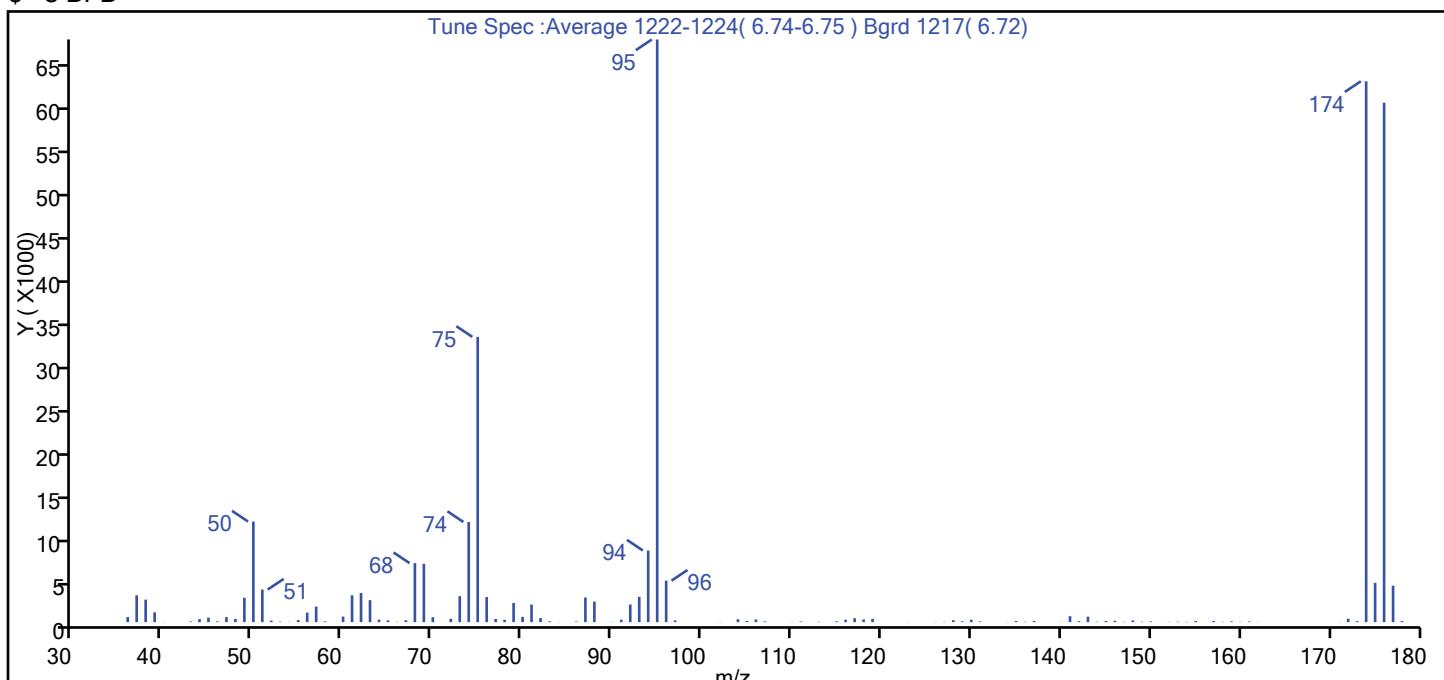
#### Reagents:

VOA_BFB_50_W_00025	Amount Added: 5.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

## TestAmerica Nashville

Data File: \\Nv\chrom\ChromData\HP32\20150518-55131.b\051815-17.D  
 Injection Date: 18-May-2015 17:09:30 Instrument ID: HP32  
 Lims ID: BFB  
 Client ID:  
 Operator ID: EML ALS Bottle#: 17 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Tune Method: BFB Method 8260

\$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.3
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	92.8
175	5 to 9% of m/z 174	6.7 (7.3)
176	Greater than 95% but less than 101% of m/z 174	89.1 (96.0)
177	5 to 9% of m/z 176	6.3 (7.0)

Data File: \\NvIchrom\ChromData\HP32\20150518-55131.b\051815-17.D\8260HP32.rslt\spectra.d  
 Injection Date: 18-May-2015 17:09:30  
 Spectrum: Tune Spec :Average 1222-1224( 6.74-6.75 ) Bgrd 1217( 6.72)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	588	67.00	222	102.00	25	144.00	49
37.00	3109	68.00	6830	104.00	340	145.00	129
38.00	2605	69.00	6751	105.00	137	146.00	160
39.00	1137	70.00	572	106.00	309	147.00	43
40.00	16	72.00	391	107.00	84	148.00	191
43.00	78	73.00	3006	110.00	20	149.00	51
44.00	349	74.00	11594	111.00	73	150.00	88
45.00	532	75.00	33016	113.00	45	152.00	27
46.00	91	76.00	2907	115.00	96	153.00	52
47.00	585	77.00	367	116.00	287	154.00	40
48.00	367	78.00	268	117.00	456	155.00	138
49.00	2830	79.00	2217	118.00	309	157.00	140
50.00	11645	80.00	612	119.00	382	158.00	31
51.00	3769	81.00	2037	123.00	18	159.00	90
52.00	179	82.00	474	126.00	20	160.00	33
53.00	60	83.00	93	127.00	35	161.00	75
54.00	19	84.00	16	128.00	223	162.00	24
55.00	242	86.00	70	129.00	90	171.00	21
56.00	1107	87.00	2854	130.00	284	172.00	401
57.00	1808	88.00	2376	131.00	81	173.00	118
58.00	84	90.00	26	134.00	17	174.00	62600
60.00	646	91.00	291	135.00	130	175.00	4545
61.00	3113	92.00	2042	136.00	46	176.00	60120
62.00	3377	93.00	2927	137.00	127	177.00	4223
63.00	2549	94.00	8292	140.00	24	178.00	122
64.00	296	95.00	67440	141.00	692		
65.00	212	96.00	4804	142.00	105		
66.00	38	97.00	197	143.00	637		

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-01.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 05-Jun-2015 10:51:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Sample Info: bfb  
 Misc. Info.: 490-0056059-001  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 12:50:33 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 12:50:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	426901	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.712	0.000	84	272090	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.824	0.000	94	133258	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	100328	25.0	24.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	86426	25.0	23.9	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	93	363912	25.0	26.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	95	109475	25.0	27.8	
\$ 9 BFB	95	6.751	6.751	0.000	0	109475	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

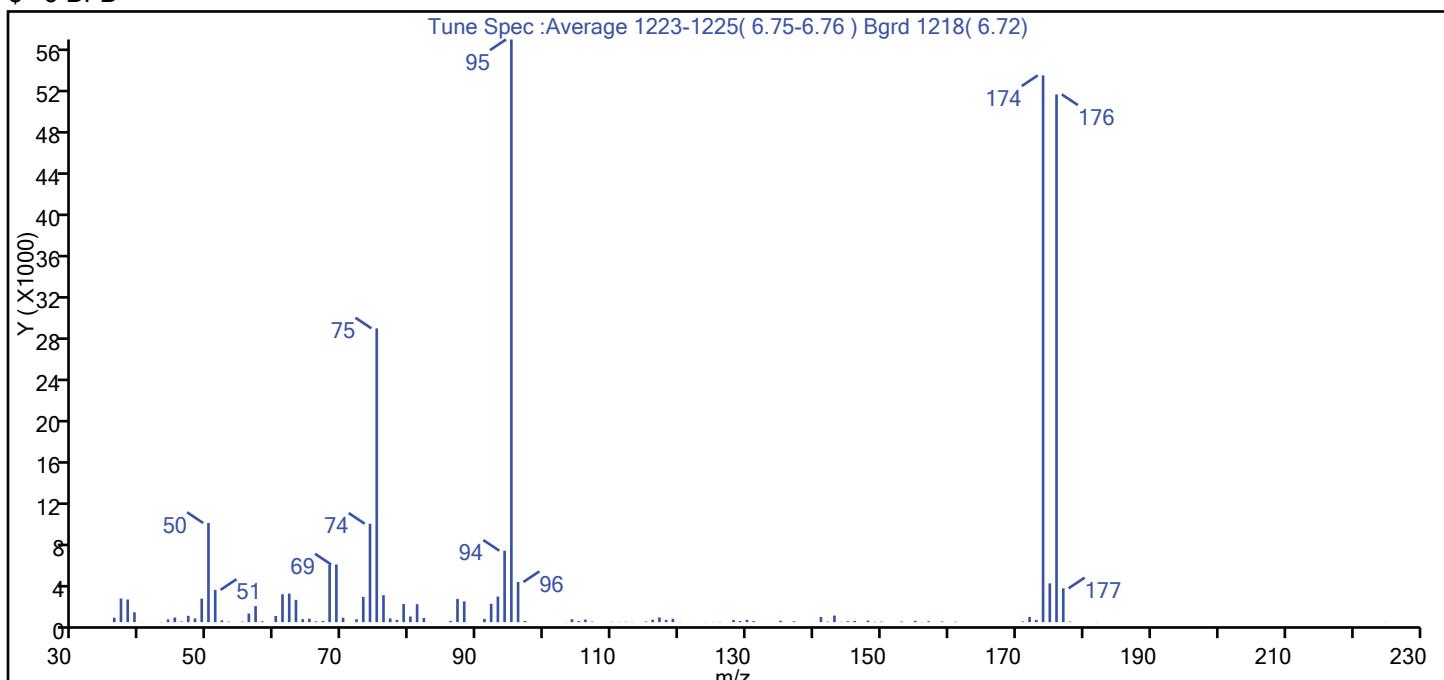
#### Reagents:

VOA_BFB_50_W_00025	Amount Added: 5.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-01.D  
 Injection Date: 05-Jun-2015 10:51:30 Instrument ID: HP32  
 Lims ID: BFB  
 Client ID:  
 Operator ID: EML ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Tune Method: BFB Method 8260

\$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	50.4
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	93.8
175	5 to 9% of m/z 174	6.7 (7.1)
176	Greater than 95% but less than 101% of m/z 174	90.6 (96.5)
177	5 to 9% of m/z 176	5.8 (6.4)

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-01.D\\8260HP32.rslt\\spectra.d  
 Injection Date: 05-Jun-2015 10:51:30  
 Spectrum: Tune Spec :Average 1223-1225( 6.75-6.76 ) Bgrd 1218( 6.72)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	435	66.00	77	97.00	113	142.00	54
37.00	2293	67.00	123	103.00	18	143.00	642
38.00	2198	68.00	5566	104.00	291	144.00	25
39.00	959	69.00	5603	105.00	103	145.00	93
40.00	11	70.00	434	106.00	253	146.00	125
43.00	16	72.00	285	107.00	56	148.00	148
44.00	267	73.00	2455	110.00	34	149.00	39
45.00	449	74.00	9556	111.00	23	150.00	53
46.00	64	75.00	28528	112.00	33	153.00	62
47.00	615	76.00	2615	113.00	20	155.00	131
48.00	362	77.00	361	115.00	62	156.00	18
49.00	2281	78.00	219	116.00	242	157.00	91
50.00	9628	79.00	1758	117.00	461	159.00	62
51.00	3135	80.00	549	118.00	216	161.00	44
52.00	169	81.00	1745	119.00	326	171.00	75
53.00	48	82.00	411	120.00	24	172.00	508
55.00	50	83.00	19	124.00	18	173.00	211
56.00	833	86.00	124	125.00	18	174.00	53088
57.00	1556	87.00	2258	126.00	23	175.00	3764
58.00	88	88.00	2018	128.00	211	176.00	51240
60.00	597	91.00	320	129.00	110	177.00	3284
61.00	2705	92.00	1785	130.00	227	178.00	60
62.00	2771	93.00	2481	131.00	96	182.00	16
63.00	2162	94.00	6935	135.00	141	225.00	18
64.00	284	95.00	56576	137.00	77		
65.00	336	96.00	3899	141.00	506		

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-28.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 05-Jun-2015 23:35:30 ALS Bottle#: 28 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Sample Info: BFB  
 Misc. Info.: 490-0056110-001  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:37:45 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:37:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	415971	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.714	0.000	84	303835	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.826	7.826	0.000	93	160419	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.025	0.000	93	96291	25.0	24.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.243	3.243	0.000	0	85278	25.0	24.2	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	410537	25.0	27.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.754	6.754	0.000	96	130861	25.0	27.6	
\$ 9 BFB	95	6.754	6.754	0.000	0	130861	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

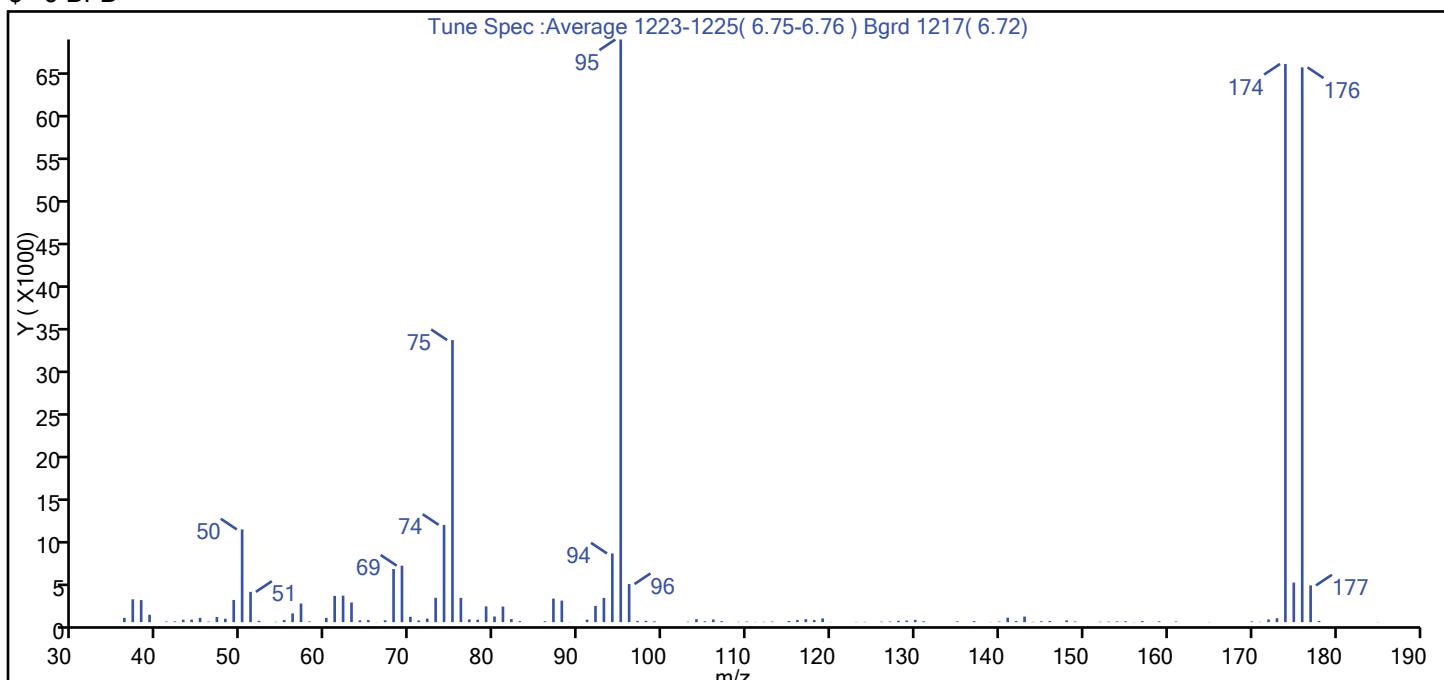
#### Reagents:

VOA_BFB_50_W_00025	Amount Added: 5.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-28.D  
 Injection Date: 05-Jun-2015 23:35:30 Instrument ID: HP32  
 Lims ID: BFB  
 Client ID:  
 Operator ID: EML ALS Bottle#: 28 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Tune Method: BFB Method 8260

\$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.9
75	30 to 60% of m/z 95	48.4
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	95.8
175	5 to 9% of m/z 174	6.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	95.2 (99.4)
177	5 to 9% of m/z 176	6.3 (6.6)

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-28.D\\8260HP32.rslt\\spectra.d  
 Injection Date: 05-Jun-2015 23:35:30  
 Spectrum: Tune Spec :Average 1223-1225( 6.75-6.76 ) Bgrd 1217( 6.72)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	511	68.00	6273	103.00	53	142.00	132
37.00	2696	69.00	6667	104.00	347	143.00	658
38.00	2604	70.00	634	105.00	102	144.00	38
39.00	867	71.00	197	106.00	314	145.00	102
41.00	72	72.00	418	107.00	117	146.00	127
42.00	93	73.00	2870	109.00	41	148.00	206
43.00	293	74.00	11480	110.00	65	149.00	78
44.00	301	75.00	33288	111.00	25	152.00	50
45.00	503	76.00	2867	112.00	42	153.00	60
46.00	65	77.00	324	113.00	66	154.00	87
47.00	608	78.00	294	115.00	138	155.00	103
48.00	403	79.00	1860	116.00	255	156.00	17
49.00	2618	80.00	668	117.00	349	157.00	124
50.00	10943	81.00	1839	118.00	244	159.00	93
51.00	3574	82.00	361	119.00	436	161.00	74
52.00	157	83.00	113	120.00	26	165.00	19
54.00	41	86.00	103	123.00	30	170.00	85
55.00	247	87.00	2782	124.00	35	171.00	39
56.00	1033	88.00	2546	126.00	56	172.00	325
57.00	2201	89.00	18	127.00	72	173.00	461
58.00	81	91.00	296	128.00	166	174.00	65880
60.00	508	92.00	1915	129.00	182	175.00	4673
61.00	3095	93.00	2860	130.00	270	176.00	65472
62.00	3128	94.00	8105	131.00	101	177.00	4336
63.00	2321	95.00	68768	135.00	90	178.00	146
64.00	211	96.00	4495	137.00	120	185.00	21
65.00	247	97.00	143	139.00	20		
66.00	21	98.00	157	140.00	64		
67.00	214	99.00	97	141.00	531		

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-01.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 08-Jun-2015 10:28:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Sample Info: bfb  
 Misc. Info.: 490-0056175-001  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:37:42 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:37:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.446	3.446	0.000	99	479123	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.711	0.000	84	355757	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	94	170899	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.027	0.000	94	110360	25.0	23.9	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.239	0.000	0	98989	25.0	24.4	
\$ 6 Toluene-d8 (Surr)	98	4.551	4.551	0.000	92	449016	25.0	25.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.750	6.750	0.000	94	151691	25.0	30.0	
\$ 9 BFB	95	6.750	6.750	0.000	0	151691	NR	NR	

### QC Flag Legend

#### Processing Flags

NR - Missing Quant Standard

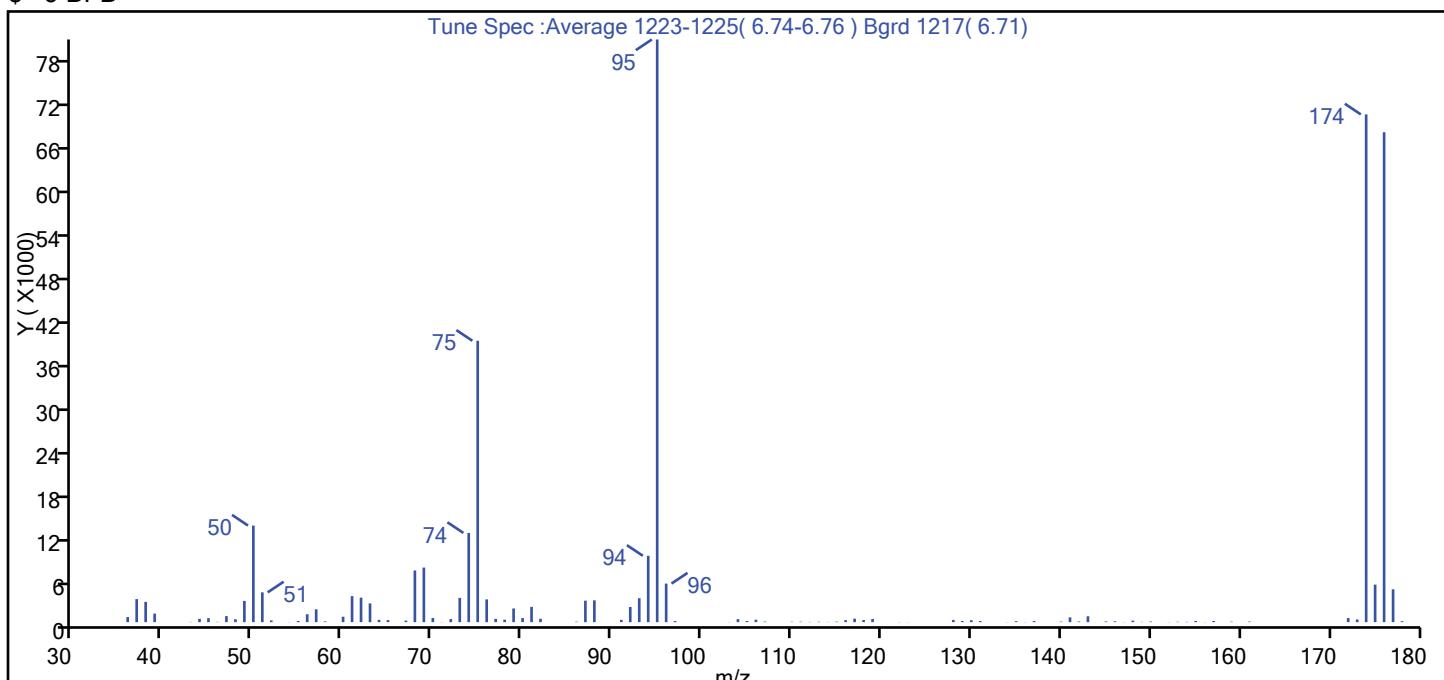
#### Reagents:

VOA_BFB_50_W_00025	Amount Added: 5.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

## TestAmerica Nashville

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-01.D  
 Injection Date: 08-Jun-2015 10:28:30 Instrument ID: HP32  
 Lims ID: BFB  
 Client ID:  
 Operator ID: EML ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 10.0 mL Dil. Factor: 1.0000  
 Method: 8260HP32 Limit Group: MSV 8260C ICAL  
 Tune Method: BFB Method 8260

\$ 9 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.6
75	30 to 60% of m/z 95	48.3
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	87.1
175	5 to 9% of m/z 174	6.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	84.1 (96.5)
177	5 to 9% of m/z 176	5.6 (6.7)

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-01.D\\8260HP32.rslt\\spectra.d  
 Injection Date: 08-Jun-2015 10:28:30  
 Spectrum: Tune Spec :Average 1223-1225( 6.74-6.76 ) Bgrd 1217( 6.71)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	696	68.00	7097	104.00	411	142.00	88
37.00	3166	69.00	7501	105.00	160	143.00	809
38.00	2781	70.00	572	106.00	341	145.00	94
39.00	1175	71.00	21	107.00	79	146.00	112
43.00	32	72.00	419	110.00	50	147.00	21
44.00	452	73.00	3335	111.00	59	148.00	208
45.00	547	74.00	12258	112.00	29	149.00	35
46.00	38	75.00	38664	113.00	56	150.00	84
47.00	829	76.00	3126	114.00	25	152.00	20
48.00	404	77.00	453	115.00	71	153.00	52
49.00	2919	78.00	339	116.00	278	154.00	44
50.00	13272	79.00	1881	117.00	482	155.00	159
51.00	4091	80.00	564	118.00	289	156.00	20
52.00	238	81.00	2096	119.00	436	157.00	161
54.00	17	82.00	467	122.00	21	159.00	64
55.00	164	86.00	65	123.00	18	161.00	76
56.00	1086	87.00	2951	128.00	304	172.00	562
57.00	1767	88.00	2997	129.00	152	173.00	367
58.00	97	91.00	314	130.00	268	174.00	69768
60.00	745	92.00	2082	131.00	151	175.00	5156
61.00	3577	93.00	3292	134.00	20	176.00	67320
62.00	3368	94.00	9116	135.00	129	177.00	4514
63.00	2576	95.00	80064	136.00	22	178.00	130
64.00	315	96.00	5300	137.00	148		
65.00	284	97.00	147	140.00	73		
67.00	217	103.00	18	141.00	653		

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: MB 490-253850/7

Matrix: Water

Lab File ID: 060515-07.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 13:41

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: MB 490-253850/7

Matrix: Water

Lab File ID: 060515-07.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 13:41

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	109		70-130
1868-53-7	Dibromofluoromethane (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	106		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 490-253850/7  
Matrix: Water Lab File ID: 060515-07.D  
Analysis Method: 8260C Date Collected: \_\_\_\_\_  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 13:41  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-07.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 05-Jun-2015 13:41:30 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: mb  
 Misc. Info.: 490-0056059-007  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:24:53 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:02:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.447	0.005	100	404058	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.717	5.711	0.006	84	265283	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.829	7.823	0.006	93	129161	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	93	95983	25.0	24.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	85310	25.0	24.9	
\$ 6 Toluene-d8 (Surr)	98	4.557	4.552	0.005	93	347954	25.0	26.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.756	6.751	0.005	96	104180	25.0	27.3	
23 Acetone	58	1.852	1.846	0.006	98	194		0.1732	
76 Toluene	91	4.612	4.606	0.006	99	1524		0.0845	

**Reagents:**

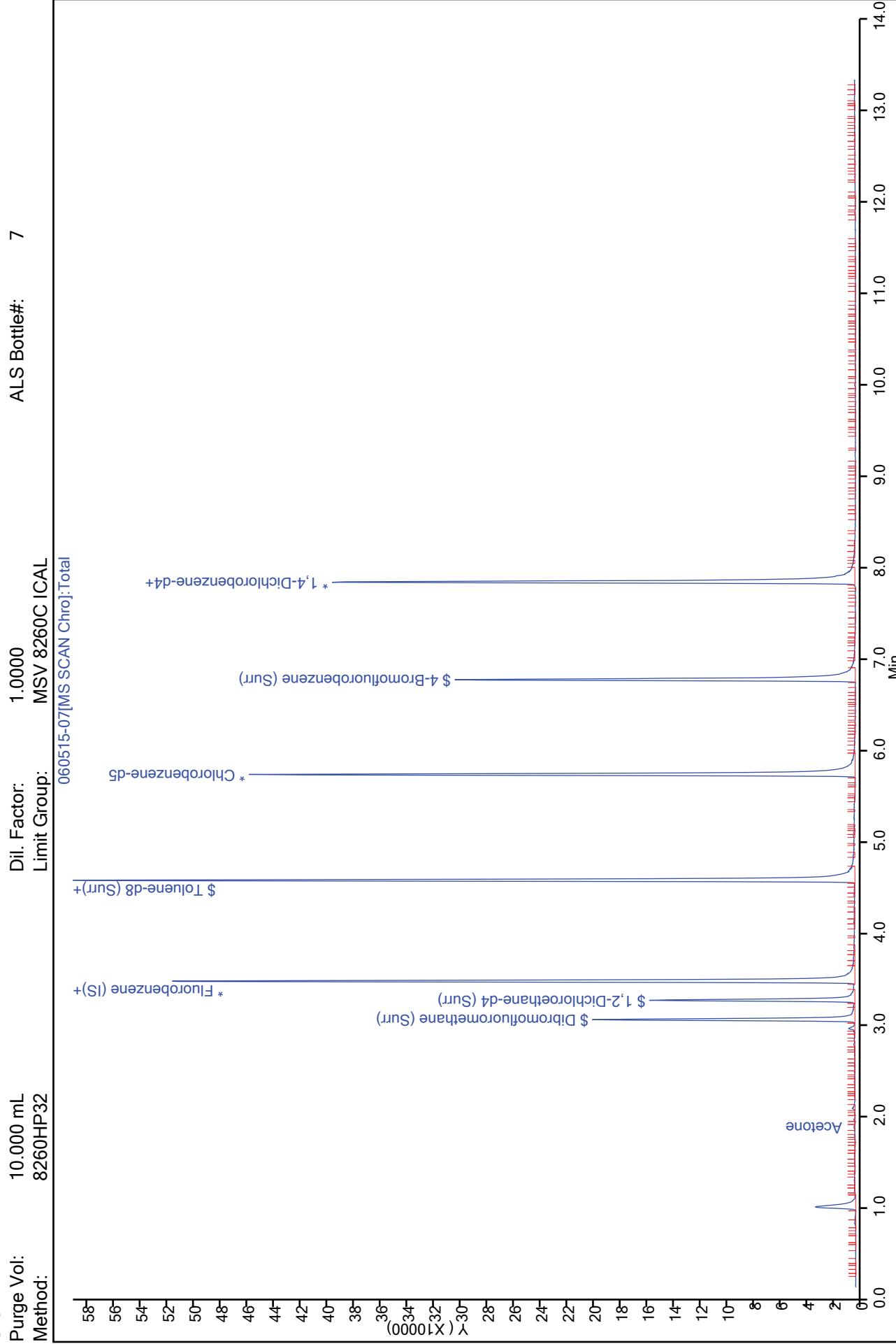
VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 08-Jun-2015 14:57:49

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\060515-07.D  
Injection Date: 05-Jun-2015 13:41:30  
Lims ID:  
Client ID:  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 7  
Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: MB 490-254074/7

Matrix: Water

Lab File ID: 060515-34.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 02:23

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	U	5.0	2.7
71-43-2	Benzene	0.20	U	0.50	0.20
75-25-2	Bromoform	0.29	U	0.50	0.29
74-83-9	Bromomethane	0.35	U	0.50	0.35
78-93-3	2-Butanone (MEK)	2.6	U	50	2.6
75-15-0	Carbon disulfide	0.22	U	0.50	0.22
56-23-5	Carbon tetrachloride	0.18	U	0.50	0.18
108-90-7	Chlorobenzene	0.18	U	0.50	0.18
124-48-1	Chlorodibromomethane	0.25	U	0.50	0.25
75-00-3	Chloroethane	0.36	U	0.50	0.36
67-66-3	Chloroform	0.23	U	0.50	0.23
74-87-3	Chloromethane	0.36	U	0.50	0.36
156-59-2	cis-1,2-Dichloroethene	0.21	U	0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	0.17	U	0.50	0.17
110-82-7	Cyclohexane	0.13	U	1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	0.94	U	5.0	0.94
95-50-1	1,2-Dichlorobenzene	0.19	U	0.50	0.19
541-73-1	1,3-Dichlorobenzene	0.18	U	0.50	0.18
106-46-7	1,4-Dichlorobenzene	0.17	U	0.50	0.17
75-27-4	Dichlorobromomethane	0.17	U	0.50	0.17
75-71-8	Dichlorodifluoromethane	0.17	U	0.50	0.17
75-34-3	1,1-Dichloroethane	0.24	U	0.50	0.24
107-06-2	1,2-Dichloroethane	0.20	U	0.50	0.20
75-35-4	1,1-Dichloroethene	0.25	U	0.50	0.25
78-87-5	1,2-Dichloropropane	0.25	U	0.50	0.25
100-41-4	Ethylbenzene	0.19	U	0.50	0.19
106-93-4	1,2-Dibromoethane	0.21	U	0.50	0.21
591-78-6	2-Hexanone	1.3	U	5.0	1.3
98-82-8	Isopropylbenzene	0.33	U	1.0	0.33
79-20-9	Methyl acetate	0.58	U	10	0.58
108-87-2	Methylcyclohexane	0.090	U	0.50	0.090
75-09-2	Methylene Chloride	0.22	U	3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	0.81	U	5.0	0.81
1634-04-4	Methyl tert-butyl ether	0.17	U	0.50	0.17
100-42-5	Styrene	0.28	U	0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	0.19	U	0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: MB 490-254074/7

Matrix: Water

Lab File ID: 060515-34.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 02:23

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	0.14	U	0.50	0.14
108-88-3	Toluene	0.17	U	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.23	U	0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	0.17	U	0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	0.20	U	0.50	0.20
71-55-6	1,1,1-Trichloroethane	0.19	U	0.50	0.19
79-00-5	1,1,2-Trichloroethane	0.19	U	0.50	0.19
79-01-6	Trichloroethene	0.20	U	0.50	0.20
75-69-4	Trichlorofluoromethane	0.21	U	0.50	0.21
76-13-1	Freon-113	0.15	U	1.0	0.15
75-01-4	Vinyl chloride	0.18	U	0.50	0.18
1330-20-7	Xylenes, Total	0.58	U	1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		70-130
1868-53-7	Dibromofluoromethane (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	110		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 490-254074/7  
Matrix: Water Lab File ID: 060515-34.D  
Analysis Method: 8260C Date Collected: \_\_\_\_\_  
Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 02:23  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 254074 Units: ug/L  
Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-34.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 06-Jun-2015 02:23:30 ALS Bottle#: 34 Worklist Smp#: 7  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: MB  
 Misc. Info.: 490-0056110-007  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:49:10 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:50:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.452	3.446	0.006	99	435140	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.716	5.711	0.005	84	304875	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.823	0.000	94	156120	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.027	3.027	0.000	94	100367	25.0	24.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.239	3.239	0.000	0	89223	25.0	24.2	
\$ 6 Toluene-d8 (Surr)	98	4.551	4.551	0.000	92	414912	25.0	27.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.750	6.750	0.000	96	128436	25.0	27.8	
23 Acetone	58	1.857	1.842	0.015	98	335		0.9554	
44 2-Butanone (MEK)	72	2.782	2.762	0.020	50	143		0.5611	
76 Toluene	91	4.611	4.601	0.010	98	1377		0.0665	
118 Hexachlorobutadiene	225	9.989	9.980	0.009	80	237		0.0970	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 09:50:05

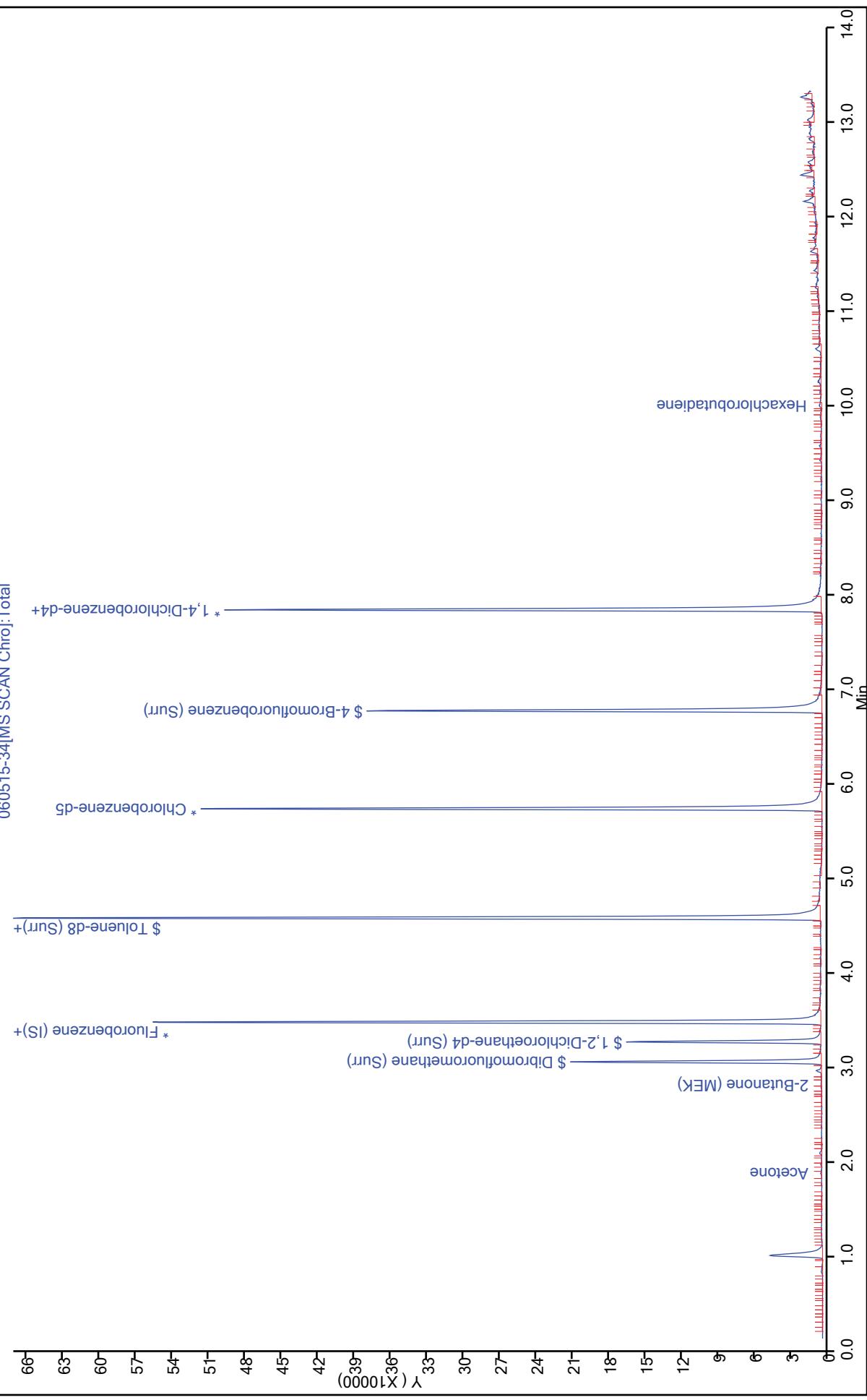
Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-34.D  
Injection Date: 06-Jun-2015 02:23:30  
Lims ID:  
Client ID:  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 7

Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL

ALS Bottle#: 34



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmexi8a NashWille

Job No.: UP-01P6U504

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: M9 UP-075Ur1P/1

Matxic: uateX

Lab File ID: -6-d450-P.D

Analysis Metho2: d76-C

Date Colle8te2: \_\_\_\_\_

Sample vt/Wol: 4-(mL)

Date Analyze2: -6/-d/7-45 4U:-d

Soil Aliq%ot Vol: \_\_\_\_\_

Dil%tion Fa8tox: 4

Soil Ectxa8t Vol.: \_\_\_\_\_

GC Col%mn: D9067U ID: -.4d (mm)

w Moist%xe: \_\_\_\_\_

LeWel: (lov/me2) Lov

Analysis 9at8h No.: 75Ur1P

Bnits: %3/L

CAS NO.	COMgOBND NAME	RESBLT	Q	RL	MDL
6106U04	A8etone	7.1	B	5.-	7.1
140Ur07	9enzenE	-.7-	B	-.5-	-.7-
1507507	9xomofoxm	-.7P	B	-.5-	-.7P
1U0dr0P	9xomomethane	-.r5	B	-.5-	-.r5
1d0Pr0r	709%tanone (MEK)	7.6	B	5-	7.6
150450-	Caxbon 2is%lfi2e	-.77	B	-.5-	-.77
5607r05	Caxbon tetxa8hluxi2e	-.4d	B	-.5-	-.4d
4-d0P-01	Chloxo benzene	-.4d	B	-.5-	-.4d
47U0Ud04	Chloxo2ibxomomethane	-.75	B	-.5-	-.75
150--0r	Chloxoethane	-.r6	B	-.5-	-.r6
610660r	Chloxofoxm	-.7r	B	-.5-	-.7r
1U0d10r	Chloxomethane	-.r6	B	-.5-	-.r6
45605P07	8is04,70Di8hluxoethene	-.74	B	-.5-	-.74
4--640-405	8is04,r0Di8hluxopxpene	-.41	B	-.5-	-.41
44-0d701	Cy8lohecane	-.4r	B	4.-	-.4r
P60470d	4,70Dibxomo0r0Chloxpoxpane	-.PU	B	5.-	-.PU
P505-04	4,70Di8hluxobenzene	-.4P	B	-.5-	-.4P
5U401r04	4,r0Di8hluxobenzene	-.4d	B	-.5-	-.4d
4-60U601	4,U0Di8hluxobenzene	-.41	B	-.5-	-.41
150710U	Di8hluxobxomomethane	-.41	B	-.5-	-.41
150140d	Di8hluxo2ifl%oxomethane	-.41	B	-.5-	-.41
150rU0r	4,40Di8hluxoethane	-.7U	B	-.5-	-.7U
4-10-607	4,70Di8hluxoethane	-.7-	B	-.5-	-.7-
150r50U	4,40Di8hluxoethene	-.75	B	-.5-	-.75
1d0d105	4,70Di8hluxopxpene	-.75	B	-.5-	-.75
4--0U40U	Ethylbenzene	-.4P	B	-.5-	-.4P
4-60Pr0U	4,70Dibxomoethane	-.74	B	-.5-	-.74
5P401d06	70Hecanone	4.r	B	5.-	4.r
Pd0d70d	Isopxpoylbzene	-.rr	B	4.-	-.rr
1P07-0P	Methyl a8etate	-.5d	B	4-	-.5d
4-d0d107	Methyl8y8lohecane	-.P-	B	-.5-	-.P-
150-P07	Methylene Chloxi2e	-.77	B	r.-	-.77
4-d04-04	U0Methyl070pentanone (MI9K)	-.d4	B	5.-	-.d4
46rU0-U0U	Methyl text0b%tyl ethex	-.41	B	-.5-	-.41
4--0U705	Styxene	-.7d	B	-.5-	-.7d
1P0rU05	4,4,7,70Tetxa8hluxoethane	-.4P	B	-.5-	-.4P

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmexi8a NashWille

Job No.: UP-01P6U504

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: M9 UP-075Ur1P/1

Matxic: uateX

Lab File ID: -6-d450-P.D

Analysis Metho2: d76-C

Date Colle8te2: \_\_\_\_\_

Sample vt/Wol: 4-(mL)

Date Analyze2: -6/-d/7-45 4U:-d

Soil Aliq%ot Vol: \_\_\_\_\_

Dil%tion Fa8tox: 4

Soil Ectxa8t Vol.: \_\_\_\_\_

GC Col%mn: D9067U ID: -.4d (mm)

w Moist%xe: \_\_\_\_\_

LeWel: (lov/me2) Lov

Analysis 9at8h No.: 75Ur1P

Bnits: %3/L

CAS NO.	COMgOBND NAME	RESBLT	Q	RL	MDL
47104d0U	Tetxa8hloxoethene	-.4U	B	-.5-	-.4U
4-d0dd0r	Tol%ene	-.41	B	-.5-	-.41
45606-05	txans04,70Di8hloxoethene	-.7r	B	-.5-	-.7r
4--640-706	txans04,r0Di8hloxoopxpene	-.41	B	-.5-	-.41
47-0d704	4,7,U0Txix8hloxbenzene	-.7-	B	-.5-	-.7-
1405506	4,4,40Txix8hloxoethane	-.4P	B	-.5-	-.4P
1P0--05	4,4,70Txix8hloxoethane	-.4P	B	-.5-	-.4P
1P0-406	Txi8hloxoethene	-.7-	B	-.5-	-.7-
1506POU	Txi8hloxoofl%oxomethane	-.74	B	-.5-	-.74
1604r04	Fxeon044r	-.45	B	4.-	-.45
150-40U	Vinyl 8hloxi2e	-.4d	B	-.5-	-.4d
4rr-07-01	Xylenes, Total	-.5d	B	4.-	-.5d

CAS NO.	SBRROGATE	WREC	Q	LIMITS
U6-0--0U	U09xomofl%oxobenzene (S%xx)	446		1-04r-
4d6d05r01	Dibxomofl%oxomethane (S%xx)	Pd		1-04r-
7-r107605	Tol%ene02d (S%xx)	4--		1-04r-
41-6-0-10-	4,70Di8hloxoethane02U (S%xx)	Pd		1-04r-

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMgOBNDS

Lab Name: TestAmexi8a NashWille Job No.: UP-01P6U504  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: M9 UP-075Ur1P/1  
Matxic: uatex Lab File ID: -6-d450-P.D  
Analysis Metho2: d76-C Date Colle8te2: \_\_\_\_\_  
Sample vt/Wol: 4- (mL) Date Analyze2: -6-/d/7-45 4U:-d  
Soil Aliq%ot Vol: \_\_\_\_\_ Dil%tion Fa8tox: 4  
Soil Ectxa8t Vol.: \_\_\_\_\_ GC Col%mn: D9067U ID: -.4d (mm)  
w Moist%xe: \_\_\_\_\_ LeWel: (lov/me2) Lov  
Analysis 9at8h No.: 75Ur1P Bnits: %3/L  
N%mbex TICs Fo%n2: - TIC Res%lt Total: -

CAS NO.	COMgOBND NAME	RT	RESBLT	Q
	TentatiWely I2entifie2 Compo%n2		None	
	Total Alkanes TIC		none	

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-09.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 08-Jun-2015 14:08:30 ALS Bottle#: 9 Worklist Smp#: 7  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: mb  
 Misc. Info.: 490-0056175-007  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:40:30 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:41:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.449	3.450	-0.001	99	419759	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.714	0.000	83	324148	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.826	7.821	0.005	94	162954	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.030	3.025	0.005	94	98651	25.0	24.4	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.242	3.237	0.005	0	87646	25.0	24.6	
\$ 6 Toluene-d8 (Surr)	98	4.554	4.555	-0.001	92	402018	25.0	25.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.753	6.748	0.005	95	139561	25.0	29.0	
76 Toluene	91	4.614	4.604	0.010	93	1191		0.0541	
110 1,4-Dichlorobenzene	146	7.847	7.843	0.004	34	727		0.0718	
118 Hexachlorobutadiene	225	9.981	9.976	0.005	85	386		0.1513	

**Reagents:**

VOA\_ISSS\_50\_W\_00026 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Jun-2015 11:41:39

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-09.D  
Injection Date: 08-Jun-2015 14:08:30  
Lims ID:  
Client ID:  
Purge Vol: 10.000 mL  
Method: 8260HP32

Operator ID: EML  
Worklist Smp#: 7

ALS Bottle#: 9

Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL

060815-09[MS SCAN Chro]:Total

1,4-Dichlorobenzene+

\* Chlorobenzene-d5

\$ Toluene-d8 (Surr)+

\* Fluorobenzene (IS)

\$ Dibromofluoromethane (Surr)+

\$ 1,2-Dichloroethane-d4 (Surr)+

\$ 4-Bromofluorobenzene (Surr)

Hexachlorobutadiene

Y (X10000)

66  
63  
60  
57  
54  
51  
48  
45  
42  
39  
36  
33  
30  
27  
24  
21  
18  
15  
12  
9  
6  
3  
0.0  
1.0  
2.0  
3.0  
4.0  
5.0  
6.0  
7.0  
8.0  
9.0  
10.0  
11.0  
12.0  
13.0  
14.0  
Min

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCS 490-253850/3

Matrix: Water

Lab File ID: 060515-03.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 11:48

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	219		5.0	2.7
71-43-2	Benzene	50.2		0.50	0.20
75-25-2	Bromoform	52.6		0.50	0.29
74-83-9	Bromomethane	42.7		0.50	0.35
78-93-3	2-Butanone (MEK)	251		50	2.6
75-15-0	Carbon disulfide	45.2		0.50	0.22
56-23-5	Carbon tetrachloride	47.7		0.50	0.18
108-90-7	Chlorobenzene	49.6		0.50	0.18
124-48-1	Chlorodibromomethane	52.9		0.50	0.25
75-00-3	Chloroethane	50.3		0.50	0.36
67-66-3	Chloroform	50.6		0.50	0.23
74-87-3	Chloromethane	42.5		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	48.7		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	50.2		0.50	0.17
110-82-7	Cyclohexane	50.0		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	51.1		5.0	0.94
95-50-1	1,2-Dichlorobenzene	52.1		0.50	0.19
541-73-1	1,3-Dichlorobenzene	52.7		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.6		0.50	0.17
75-27-4	Dichlorobromomethane	47.1		0.50	0.17
75-71-8	Dichlorodifluoromethane	46.3		0.50	0.17
75-34-3	1,1-Dichloroethane	47.1		0.50	0.24
107-06-2	1,2-Dichloroethane	45.8		0.50	0.20
75-35-4	1,1-Dichloroethene	46.2		0.50	0.25
78-87-5	1,2-Dichloropropane	46.4		0.50	0.25
100-41-4	Ethylbenzene	52.9		0.50	0.19
106-93-4	1,2-Dibromoethane	50.8		0.50	0.21
591-78-6	2-Hexanone	279		5.0	1.3
98-82-8	Isopropylbenzene	54.8		1.0	0.33
79-20-9	Methyl acetate	240		10	0.58
108-87-2	Methylcyclohexane	47.4		0.50	0.090
75-09-2	Methylene Chloride	49.0		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	247		5.0	0.81
1634-04-4	Methyl tert-butyl ether	47.2		0.50	0.17
100-42-5	Styrene	55.7		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	50.2		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCS 490-253850/3

Matrix: Water

Lab File ID: 060515-03.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 11:48

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	46.0		0.50	0.14
108-88-3	Toluene	48.3		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	48.0		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	51.0		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	55.0		0.50	0.20
71-55-6	1,1,1-Trichloroethane	47.2		0.50	0.19
79-00-5	1,1,2-Trichloroethane	46.6		0.50	0.19
79-01-6	Trichloroethene	46.2		0.50	0.20
75-69-4	Trichlorofluoromethane	45.3		0.50	0.21
76-13-1	Freon-113	44.9		1.0	0.15
75-01-4	Vinyl chloride	47.5		0.50	0.18
1330-20-7	Xylenes, Total	108		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		70-130
1868-53-7	Dibromofluoromethane (Surr)	103		70-130
2037-26-5	Toluene-d8 (Surr)	105		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-Jun-2015 11:48:30 ALS Bottle#: 3 Worklist Smp#: 3  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: lcs  
 Misc. Info.: 490-0056059-003  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:00:19 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:01:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	400298	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	289767	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.823	0.001	94	162666	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	93	98940	25.0	25.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.240	0.000	0	85635	25.0	25.2	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	377275	25.0	26.2	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.751	0.000	95	129145	25.0	26.8	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	210684	50.0	46.3	
11 Chloromethane	50	1.166	1.177	-0.011	98	166681	50.0	42.5	
12 Vinyl chloride	62	1.215	1.215	0.000	98	214015	50.0	47.5	
13 Butadiene	54	1.232	1.231	0.001	88	196677	50.0	49.0	
14 Bromomethane	96	1.379	1.378	0.001	90	138971	50.0	42.7	
15 Chloroethane	64	1.428	1.427	0.001	99	144255	50.0	50.3	
16 Dichlorofluoromethane	67	1.520	1.520	0.000	97	353786	50.0	49.1	
17 Trichlorofluoromethane	101	1.553	1.552	0.001	98	341452	50.0	45.3	
18 Ethanol	45	1.651	1.661	-0.010	99	16131	2000.0	2243.3	
19 Ethyl ether	59	1.694	1.694	0.000	88	116694	50.0	46.1	
20 Acrolein	56	1.765	1.765	0.000	100	34535	125.0	117.4	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	93	204526	50.0	44.9	
22 1,1-Dichloroethene	96	1.809	1.808	0.001	97	193734	50.0	46.2	
23 Acetone	58	1.841	1.846	-0.005	100	32601	250.0	218.7	
24 Iodomethane	142	1.896	1.895	0.001	97	187411	50.0	31.4	
25 Isopropyl alcohol	45	1.912	1.912	0.000	99	39763	500.0	487.6	
26 Carbon disulfide	76	1.934	1.934	0.000	99	499271	50.0	45.2	
28 Acetonitrile	41	1.988	1.988	0.000	76	351453	500.0	497.0	
29 3-Chloro-1-propene	76	1.988	1.993	-0.005	92	200233	NC	NC	
30 Methyl acetate	43	1.999	2.004	-0.005	96	336773	250.0	240.2	
31 Methylene Chloride	84	2.054	2.053	0.001	87	199672	50.0	49.0	
32 2-Methyl-2-propanol	59	2.119	2.119	0.000	99	68641	500.0	475.8	
33 Acrylonitrile	53	2.184	2.189	-0.005	99	340382	500.0	494.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	86	266794	50.0	48.0	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	395921	50.0	47.2	
36 Hexane	57	2.331	2.336	-0.005	89	294310	50.0	50.5	
37 1,1-Dichloroethane	63	2.418	2.423	-0.005	96	353458	50.0	47.1	
39 Vinyl acetate	43	2.446	2.445	0.001	97	691425	100.0	98.7	
38 Isopropyl ether	45	2.451	2.451	0.000	83	534194	50.0	48.8	
40 2-Chloro-1,3-butadiene	53	2.473	2.472	0.001	90	299929	50.0	47.9	
41 Tert-butyl ethyl ether	59	2.652	2.658	-0.006	96	502261	50.0	49.9	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	75	331029	50.0	50.9	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	79	324106	50.0	48.7	
44 2-Butanone (MEK)	72	2.761	2.766	-0.005	98	58914	250.0	251.3	
45 Ethyl acetate	43	2.788	2.788	0.000	98	165492	100.0	93.5	
46 Propionitrile	54	2.799	2.799	0.000	99	129961	500.0	515.2	
47 Methacrylonitrile	41	2.881	2.886	-0.005	90	542735	500.0	475.7	
48 Chlorobromomethane	130	2.886	2.886	0.000	76	131108	50.0	47.6	
50 Chloroform	83	2.925	2.924	0.001	91	384158	50.0	50.6	
49 Tetrahydrofuran	42	2.930	2.930	0.000	82	48828	100.0	91.9	
51 1,1,1-Trichloroethane	97	3.044	3.044	0.000	97	341839	50.0	47.2	
53 Cyclohexane	56	3.077	3.077	0.000	86	366093	50.0	50.0	
55 Carbon tetrachloride	117	3.142	3.142	0.000	94	304634	50.0	47.7	
54 1,1-Dichloropropene	75	3.142	3.142	0.000	97	305619	50.0	49.7	
56 Isobutyl alcohol	43	3.224	3.224	0.000	95	77236	1250.0	1246.3	
57 Benzene	78	3.273	3.273	0.000	95	913370	50.0	50.2	
58 t-Amyl alcohol	59	3.284	3.283	0.001	75	56737	500.0	448.9	
59 1,2-Dichloroethane	62	3.284	3.283	0.001	98	218408	50.0	45.8	
60 Tert-amyl methyl ether	73	3.344	3.343	0.001	98	424821	50.0	47.5	
61 n-Heptane	43	3.425	3.425	0.000	88	260181	50.0	51.1	
62 n-Butanol	56	3.659	3.665	-0.006	85	50796	1250.0	1217.1	
63 Trichloroethene	130	3.687	3.686	0.001	97	245528	50.0	46.2	
64 Ethyl acrylate	55	3.763	3.763	0.000	99	109750	50.0	47.3	
65 Methylcyclohexane	83	3.812	3.812	0.000	85	388705	50.0	47.4	
66 1,2-Dichloropropane	63	3.844	3.844	0.000	95	192313	50.0	46.4	
67 Methyl methacrylate	41	3.921	3.920	0.001	88	168946	100.0	94.0	
68 Dibromomethane	93	3.926	3.926	0.000	91	93720	50.0	45.7	
69 1,4-Dioxane	88	3.959	3.958	0.001	89	15923	1000.0	1004.2	
71 Dichlorobromomethane	83	4.030	4.029	0.001	99	256461	50.0	47.1	
72 2-Nitropropane	43	4.198	4.198	0.000	98	48006	100.0	90.6	
73 2-Chloroethyl vinyl ether	63	4.247	4.247	0.000	91	68176	50.0	44.9	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	295607	50.0	50.2	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.481	-0.005	94	172478	250.0	246.6	
76 Toluene	91	4.607	4.606	0.001	99	950210	50.0	48.3	
77 trans-1,3-Dichloropropene	75	4.775	4.775	0.000	91	229564	50.0	51.0	
78 Ethyl methacrylate	69	4.852	4.851	0.001	87	162378	50.0	48.6	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	134246	50.0	46.6	
80 Tetrachloroethene	166	5.026	5.025	0.001	97	254361	50.0	46.0	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	87	233330	50.0	49.0	
82 2-Hexanone	58	5.129	5.134	-0.005	93	157834	250.0	279.2	
83 Chlorodibromomethane	127	5.233	5.232	0.001	89	130379	50.0	52.9	
84 n-Butyl acetate	43	5.238	5.238	0.000	96	122068	50.0	53.7	
85 Ethylene Dibromide	107	5.331	5.330	0.001	99	130980	50.0	50.8	
86 1-Chlorohexane	91	5.717	5.717	0.000	93	312448	50.0	49.4	
87 Chlorobenzene	112	5.739	5.739	0.001	96	618746	50.0	49.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	215557	50.0	51.7	
89 Ethylbenzene	91	5.831	5.831	0.000	97	1042412	50.0	52.9	
90 m-Xylene & p-Xylene	91	5.935	5.934	0.001	0	817066	50.0	53.0	
91 o-Xylene	91	6.278	6.277	0.001	96	845442	50.0	55.2	
92 Styrene	104	6.294	6.294	0.000	95	678420	50.0	55.7	
93 Bromoform	173	6.457	6.457	0.000	98	88737	50.0	52.6	
94 Isopropylbenzene	105	6.610	6.609	0.001	95	1052205	50.0	54.8	
95 Cyclohexanone	55	6.708	6.707	0.001	91	35921	500.0	576.4	E
96 Bromobenzene	77	6.877	6.876	0.000	89	327693	50.0	51.4	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	135404	50.0	50.2	
98 1,2,3-Trichloropropane	110	6.925	6.925	0.000	82	42171	50.0	49.8	
99 trans-1,4-Dichloro-2-butene	53	6.947	6.952	-0.005	81	33641	50.0	57.6	
100 N-Propylbenzene	91	6.985	6.991	-0.005	98	1225006	50.0	55.7	
101 2-Chlorotoluene	91	7.062	7.061	0.001	98	713304	50.0	52.3	
102 1,3,5-Trimethylbenzene	105	7.160	7.159	0.001	95	909196	50.0	56.4	
103 4-Chlorotoluene	91	7.160	7.165	-0.005	98	852701	50.0	54.3	
104 tert-Butylbenzene	119	7.454	7.453	0.001	92	760306	50.0	54.5	
106 1,2,4-Trimethylbenzene	105	7.502	7.502	0.000	97	910560	50.0	56.3	
107 sec-Butylbenzene	105	7.660	7.660	0.000	94	1142368	50.0	56.5	
108 1,3-Dichlorobenzene	146	7.758	7.758	0.000	98	491731	50.0	52.7	
109 4-Isopropyltoluene	119	7.807	7.807	0.000	96	1009228	50.0	56.3	
110 1,4-Dichlorobenzene	146	7.845	7.845	0.000	95	500584	50.0	49.6	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	879203	50.0	53.7	
112 Benzyl chloride	91	7.982	7.981	0.001	98	257688	50.0	51.1	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	97	441407	50.0	52.1	
114 n-Butylbenzene	91	8.199	8.199	0.000	97	863195	50.0	60.7	
115 1,2-Dibromo-3-Chloropropan	157	8.956	8.950	0.006	91	25093	50.0	51.1	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	339051	50.0	54.6	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	262436	50.0	55.0	
118 Hexachlorobutadiene	225	9.979	9.979	0.000	97	131128	50.0	51.5	
119 Naphthalene	128	10.055	10.055	0.000	96	408472	50.0	51.6	
120 1,2,3-Trichlorobenzene	180	10.349	10.349	0.000	95	208924	50.0	55.7	
S 134 Xylenes, Total	1				0		100.0	108.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	101.1	
S 137 1,2-Dichloroethene, Total	1				0		100.0	96.7	
S 138 Trihalomethanes, Total	1				0		200.0	203.1	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

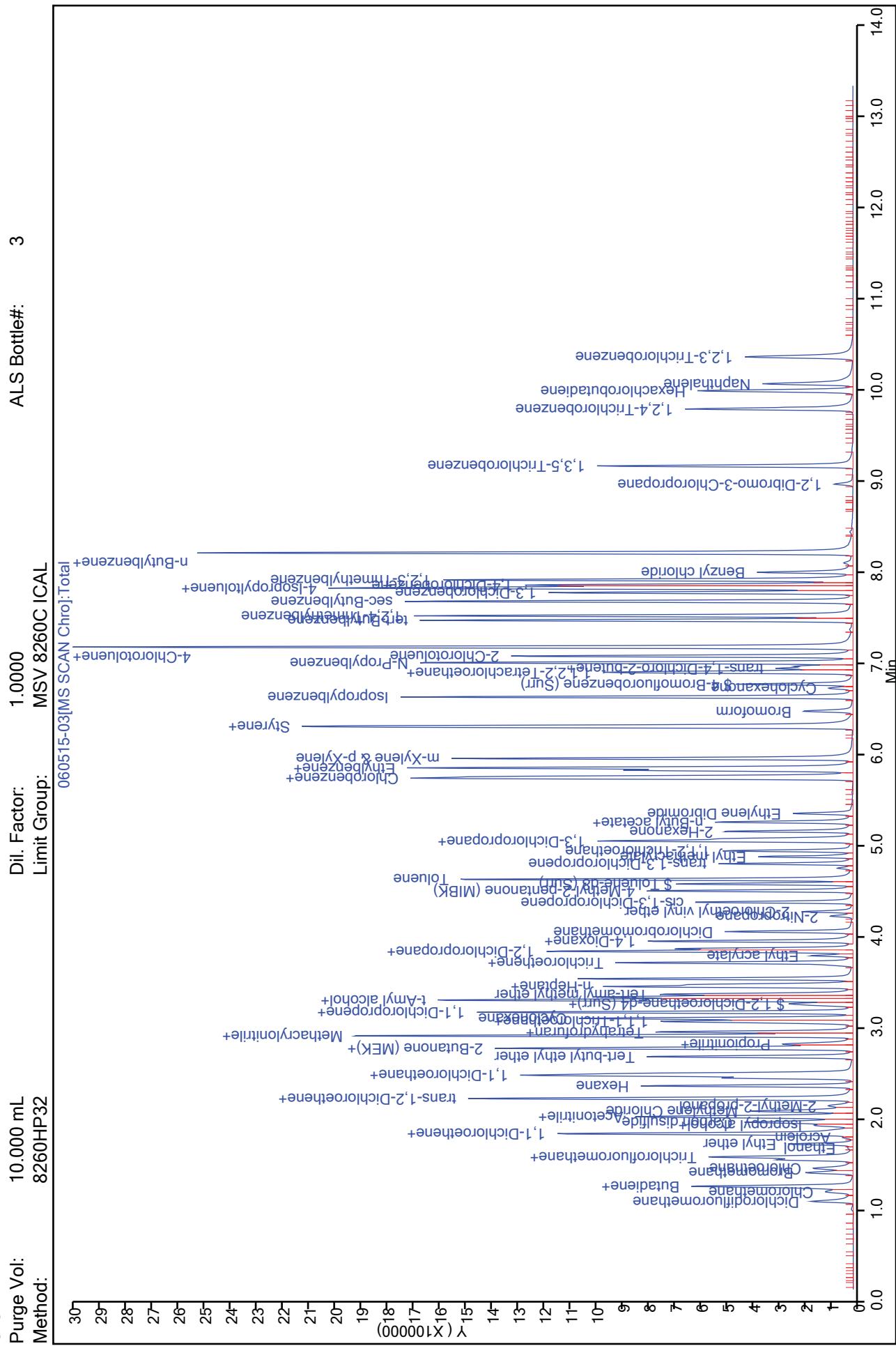
**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 08-Jun-2015 13:01:05

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-03.D  
Injection Date: 05-Jun-2015 11:48:30  
Instrument ID: HP32



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCS 490-254074/3

Matrix: Water

Lab File ID: 060515-30.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 00:31

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	239		5.0	2.7
71-43-2	Benzene	47.0		0.50	0.20
75-25-2	Bromoform	52.9		0.50	0.29
74-83-9	Bromomethane	41.8		0.50	0.35
78-93-3	2-Butanone (MEK)	229		50	2.6
75-15-0	Carbon disulfide	42.0		0.50	0.22
56-23-5	Carbon tetrachloride	45.5		0.50	0.18
108-90-7	Chlorobenzene	48.9		0.50	0.18
124-48-1	Chlorodibromomethane	52.7		0.50	0.25
75-00-3	Chloroethane	51.1		0.50	0.36
67-66-3	Chloroform	47.2		0.50	0.23
74-87-3	Chloromethane	44.8		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	44.4		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	50.6		0.50	0.17
110-82-7	Cyclohexane	46.9		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	54.8		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.1		0.50	0.19
541-73-1	1,3-Dichlorobenzene	52.7		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.1		0.50	0.17
75-27-4	Dichlorobromomethane	46.7		0.50	0.17
75-71-8	Dichlorodifluoromethane	46.3		0.50	0.17
75-34-3	1,1-Dichloroethane	46.3		0.50	0.24
107-06-2	1,2-Dichloroethane	44.2		0.50	0.20
75-35-4	1,1-Dichloroethene	46.1		0.50	0.25
78-87-5	1,2-Dichloropropane	47.1		0.50	0.25
100-41-4	Ethylbenzene	51.8		0.50	0.19
106-93-4	1,2-Dibromoethane	50.6		0.50	0.21
591-78-6	2-Hexanone	268		5.0	1.3
98-82-8	Isopropylbenzene	53.6		1.0	0.33
79-20-9	Methyl acetate	236		10	0.58
108-87-2	Methylcyclohexane	45.5		0.50	0.090
75-09-2	Methylene Chloride	48.7		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	254		5.0	0.81
1634-04-4	Methyl tert-butyl ether	46.3		0.50	0.17
100-42-5	Styrene	55.0		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	49.9		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 490-254074/3  
Matrix: Water Lab File ID: 060515-30.D  
Analysis Method: 8260C Date Collected: \_\_\_\_\_  
Sample wt/vol: 10 (mL) Date Analyzed: 06/06/2015 00:31  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 254074 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	43.5		0.50	0.14
108-88-3	Toluene	47.8		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	46.3		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	49.6		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	54.0		0.50	0.20
71-55-6	1,1,1-Trichloroethane	45.2		0.50	0.19
79-00-5	1,1,2-Trichloroethane	44.4		0.50	0.19
79-01-6	Trichloroethene	46.1		0.50	0.20
75-69-4	Trichlorofluoromethane	44.6		0.50	0.21
76-13-1	Freon-113	44.2		1.0	0.15
75-01-4	Vinyl chloride	49.1		0.50	0.18
1330-20-7	Xylenes, Total	106		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		70-130
1868-53-7	Dibromofluoromethane (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	106		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-30.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 06-Jun-2015 00:31:30 ALS Bottle#: 30 Worklist Smp#: 3  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: LCS  
 Misc. Info.: 490-0056110-003  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:41:32 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:42:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	432705	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.712	-0.001	84	317029	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.824	0.000	93	172301	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	94	99862	25.0	24.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.241	-0.001	0	88286	25.0	24.1	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	415936	25.0	26.4	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.752	-0.001	96	142843	25.0	28.0	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	227808	50.0	46.3	
11 Chloromethane	50	1.172	1.177	-0.005	99	189834	50.0	44.8	
12 Vinyl chloride	62	1.215	1.216	-0.001	98	239133	50.0	49.1	
13 Butadiene	54	1.232	1.232	0.000	88	219600	50.0	50.7	
14 Bromomethane	96	1.378	1.379	-0.001	90	147098	50.0	41.8	
15 Chloroethane	64	1.427	1.428	-0.001	99	158300	50.0	51.1	
16 Dichlorofluoromethane	67	1.525	1.526	-0.001	97	384657	50.0	49.4	
17 Trichlorofluoromethane	101	1.553	1.553	0.000	98	364063	50.0	44.6	
18 Ethanol	45	1.651	1.651	0.000	99	15720	2000.0	2020.5	
19 Ethyl ether	59	1.694	1.695	-0.001	88	130490	50.0	47.7	
20 Acrolein	56	1.765	1.771	-0.006	97	37631	125.0	118.4	
21 1,1,2-Trichloro-1,2,2-trif	101	1.809	1.803	0.006	93	217970	50.0	44.2	
22 1,1-Dichloroethene	96	1.814	1.814	0.000	97	208958	50.0	46.1	
23 Acetone	58	1.847	1.842	0.005	100	38422	250.0	238.6	
24 Iodomethane	142	1.901	1.896	0.005	98	187848	50.0	29.1	
25 Isopropyl alcohol	45	1.912	1.912	0.000	100	40489	500.0	459.1	
26 Carbon disulfide	76	1.934	1.934	0.000	100	500869	50.0	42.0	
28 Acetonitrile	41	1.994	1.994	0.000	76	359712	500.0	470.5	
29 3-Chloro-1-propene	76	1.994	1.994	0.000	93	205864	NC	NC	
30 Methyl acetate	43	2.004	2.005	-0.001	97	357539	250.0	235.9	
31 Methylene Chloride	84	2.059	2.059	0.000	87	214492	50.0	48.7	
32 2-Methyl-2-propanol	59	2.113	2.114	-0.001	100	71750	500.0	460.1	
33 Acrylonitrile	53	2.190	2.190	0.000	99	354225	500.0	475.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	96	278379	50.0	46.3	
35 Methyl tert-butyl ether	73	2.200	2.195	0.005	94	420431	50.0	46.3	
36 Hexane	57	2.337	2.337	0.000	89	280375	50.0	44.5	
37 1,1-Dichloroethane	63	2.424	2.424	0.000	96	375926	50.0	46.3	
39 Vinyl acetate	43	2.445	2.446	-0.001	97	706349	100.0	93.3	
38 Isopropyl ether	45	2.451	2.451	0.000	83	564888	50.0	47.8	
40 2-Chloro-1,3-butadiene	53	2.473	2.473	0.000	90	314377	50.0	46.5	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	96	509866	50.0	46.8	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	71	299928	50.0	42.7	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	319427	50.0	44.4	
44 2-Butanone (MEK)	72	2.767	2.762	0.005	98	58147	250.0	229.4	
45 Ethyl acetate	43	2.788	2.789	-0.001	98	176118	100.0	92.0	
46 Propionitrile	54	2.799	2.800	-0.001	99	126317	500.0	463.3	
47 Methacrylonitrile	41	2.886	2.881	0.005	91	559172	500.0	453.4	
48 Chlorobromomethane	130	2.886	2.887	-0.001	77	133386	50.0	44.8	
50 Chloroform	83	2.930	2.930	0.000	91	388014	50.0	47.2	
49 Tetrahydrofuran	42	2.930	2.930	0.000	39	52098	100.0	90.7	
51 1,1,1-Trichloroethane	97	3.044	3.045	-0.001	97	353948	50.0	45.2	
53 Cyclohexane	56	3.077	3.077	0.000	87	370914	50.0	46.9	
54 1,1-Dichloropropene	75	3.142	3.143	-0.001	97	312524	50.0	47.0	
55 Carbon tetrachloride	117	3.148	3.148	0.000	96	314640	50.0	45.5	
56 Isobutyl alcohol	43	3.224	3.219	0.005	94	77022	1250.0	1149.8	
57 Benzene	78	3.273	3.273	0.000	95	923158	50.0	47.0	
58 t-Amyl alcohol	59	3.284	3.284	0.000	75	58220	500.0	426.1	
59 1,2-Dichloroethane	62	3.284	3.284	0.000	98	227594	50.0	44.2	
60 Tert-amyl methyl ether	73	3.344	3.344	0.000	97	457141	50.0	47.2	
61 n-Heptane	43	3.425	3.426	-0.001	89	234755	50.0	42.6	
62 n-Butanol	56	3.665	3.660	0.005	86	53390	1250.0	1183.4	
63 Trichloroethene	130	3.687	3.687	-0.001	97	264753	50.0	46.1	
64 Ethyl acrylate	55	3.763	3.763	0.000	98	130227	50.0	51.9	
65 Methylcyclohexane	83	3.812	3.818	-0.006	86	403476	50.0	45.5	
66 1,2-Dichloropropane	63	3.844	3.845	-0.001	95	210845	50.0	47.1	
67 Methyl methacrylate	41	3.921	3.921	0.000	88	185317	100.0	95.3	
68 Dibromomethane	93	3.926	3.926	0.000	91	100166	50.0	45.2	
69 1,4-Dioxane	88	3.953	3.954	-0.001	93	16505	1000.0	962.9	
71 Dichlorobromomethane	83	4.029	4.030	-0.001	99	274895	50.0	46.7	
72 2-Nitropropane	43	4.198	4.204	-0.006	96	53176	100.0	92.8	
73 2-Chloroethyl vinyl ether	63	4.247	4.248	-0.001	91	76045	50.0	45.8	
74 cis-1,3-Dichloropropene	75	4.356	4.356	0.000	97	326024	50.0	50.6	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	194711	250.0	254.4	
76 Toluene	91	4.601	4.601	0.000	99	1029859	50.0	47.8	
77 trans-1,3-Dichloropropene	75	4.775	4.776	-0.001	91	244548	50.0	49.6	
78 Ethyl methacrylate	69	4.851	4.852	-0.001	87	176932	50.0	48.4	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	139951	50.0	44.4	
80 Tetrachloroethene	166	5.026	5.026	0.000	98	263548	50.0	43.5	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	87	250079	50.0	48.0	
82 2-Hexanone	58	5.129	5.129	0.000	94	165800	250.0	268.1	
83 Chlorodibromomethane	127	5.232	5.233	-0.001	90	142290	50.0	52.7	
84 n-Butyl acetate	43	5.238	5.238	0.000	97	129564	50.0	52.7	
85 Ethylene Dibromide	107	5.330	5.331	-0.001	98	142893	50.0	50.6	
86 1-Chlorohexane	91	5.717	5.717	0.000	93	334087	50.0	48.8	
87 Chlorobenzene	112	5.739	5.739	0.000	97	667968	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	95	234727	50.0	51.4	
89 Ethylbenzene	91	5.831	5.832	-0.001	97	1117152	50.0	51.8	
90 m-Xylene & p-Xylene	91	5.935	5.935	0.000	0	875265	50.0	51.9	
91 o-Xylene	91	6.278	6.278	0.000	96	904277	50.0	54.0	
92 Styrene	104	6.294	6.294	0.000	95	732217	50.0	55.0	
93 Bromoform	173	6.457	6.458	-0.001	99	97679	50.0	52.9	
94 Isopropylbenzene	105	6.610	6.610	0.000	95	1125909	50.0	53.6	
95 Cyclohexanone	55	6.702	6.708	-0.006	90	67154	500.0	996.4	E
96 Bromobenzene	77	6.876	6.877	-0.001	89	349250	50.0	51.7	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	96	142825	50.0	49.9	
98 1,2,3-Trichloropropane	110	6.925	6.926	-0.001	81	44930	50.0	50.0	
99 trans-1,4-Dichloro-2-butene	53	6.947	6.948	-0.001	82	33547	50.0	54.3	
100 N-Propylbenzene	91	6.985	6.986	-0.001	98	1294111	50.0	55.5	
101 2-Chlorotoluene	91	7.061	7.062	-0.001	98	760680	50.0	52.7	
103 4-Chlorotoluene	91	7.165	7.160	0.005	98	900866	50.0	54.2	
102 1,3,5-Trimethylbenzene	105	7.159	7.160	-0.001	95	955694	50.0	55.9	
104 tert-Butylbenzene	119	7.453	7.454	-0.001	92	818791	50.0	55.4	
106 1,2,4-Trimethylbenzene	105	7.502	7.503	-0.001	97	965057	50.0	56.3	
107 sec-Butylbenzene	105	7.660	7.661	-0.001	94	1194666	50.0	55.8	
108 1,3-Dichlorobenzene	146	7.758	7.759	-0.001	98	520504	50.0	52.7	
109 4-Isopropyltoluene	119	7.807	7.808	-0.001	96	1040401	50.0	54.8	
110 1,4-Dichlorobenzene	146	7.845	7.846	-0.001	95	525524	50.0	49.1	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	929013	50.0	53.6	
112 Benzyl chloride	91	7.981	7.982	-0.001	98	223010	50.0	40.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	97	458899	50.0	51.1	
114 n-Butylbenzene	91	8.199	8.194	0.005	97	867170	50.0	57.6	
115 1,2-Dibromo-3-Chloropropan	157	8.956	8.951	0.005	92	28504	50.0	54.8	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	352341	50.0	53.5	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	273028	50.0	54.0	
118 Hexachlorobutadiene	225	9.979	9.980	-0.001	97	134085	50.0	49.7	
119 Naphthalene	128	10.055	10.056	-0.001	97	429909	50.0	51.2	
120 1,2,3-Trichlorobenzene	180	10.355	10.350	0.005	96	206481	50.0	52.0	
S 134 Xylenes, Total	1				0		100.0	105.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.2	
S 137 1,2-Dichloroethene, Total	1				0		100.0	90.7	
S 138 Trihalomethanes, Total	1				0		200.0	199.6	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

**Reagents:**

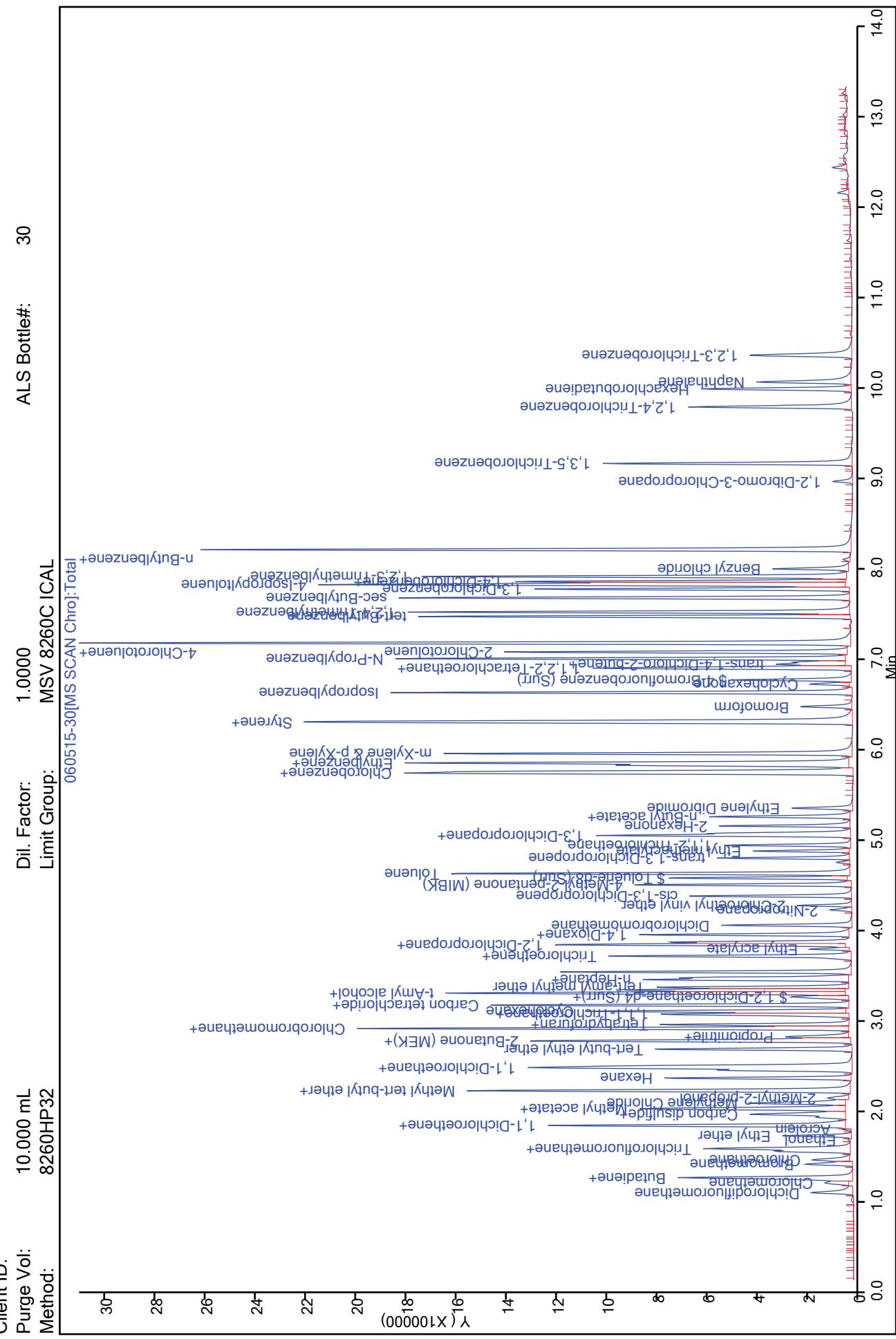
V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 10-Jun-2015 09:42:19

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-30.D  
 Injection Date: 06-Jun-2015 00:31:30  
 Lims ID: LCS  
 Client ID:  
 Purge Vol: 10.000 mL  
 Method: 8260HP32

Dil. Factor: 1.0000  
 Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCS 490-254379/3

Matrix: Water

Lab File ID: 060815-03.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 11:23

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	243		5.0	2.7
71-43-2	Benzene	48.9		0.50	0.20
75-25-2	Bromoform	49.9		0.50	0.29
74-83-9	Bromomethane	41.0		0.50	0.35
78-93-3	2-Butanone (MEK)	230		50	2.6
75-15-0	Carbon disulfide	48.4		0.50	0.22
56-23-5	Carbon tetrachloride	44.7		0.50	0.18
108-90-7	Chlorobenzene	49.9		0.50	0.18
124-48-1	Chlorodibromomethane	52.3		0.50	0.25
75-00-3	Chloroethane	56.1		0.50	0.36
67-66-3	Chloroform	48.0		0.50	0.23
74-87-3	Chloromethane	54.2		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	47.6		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	48.1		0.50	0.17
110-82-7	Cyclohexane	49.4		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	52.3		5.0	0.94
95-50-1	1,2-Dichlorobenzene	50.9		0.50	0.19
541-73-1	1,3-Dichlorobenzene	53.5		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.9		0.50	0.17
75-27-4	Dichlorobromomethane	46.5		0.50	0.17
75-71-8	Dichlorodifluoromethane	52.5		0.50	0.17
75-34-3	1,1-Dichloroethane	49.9		0.50	0.24
107-06-2	1,2-Dichloroethane	43.0		0.50	0.20
75-35-4	1,1-Dichloroethene	49.8		0.50	0.25
78-87-5	1,2-Dichloropropane	47.9		0.50	0.25
100-41-4	Ethylbenzene	54.1		0.50	0.19
106-93-4	1,2-Dibromoethane	50.4		0.50	0.21
591-78-6	2-Hexanone	275		5.0	1.3
98-82-8	Isopropylbenzene	54.4		1.0	0.33
79-20-9	Methyl acetate	239		10	0.58
108-87-2	Methylcyclohexane	46.7		0.50	0.090
75-09-2	Methylene Chloride	52.0		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	225		5.0	0.81
1634-04-4	Methyl tert-butyl ether	46.7		0.50	0.17
100-42-5	Styrene	55.1		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	51.9		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCS 490-254379/3

Matrix: Water

Lab File ID: 060815-03.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 11:23

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	41.8		0.50	0.14
108-88-3	Toluene	45.1		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	50.2		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	47.1		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	53.1		0.50	0.20
71-55-6	1,1,1-Trichloroethane	44.8		0.50	0.19
79-00-5	1,1,2-Trichloroethane	41.9		0.50	0.19
79-01-6	Trichloroethene	45.8		0.50	0.20
75-69-4	Trichlorofluoromethane	46.7		0.50	0.21
76-13-1	Freon-113	46.7		1.0	0.15
75-01-4	Vinyl chloride	57.8		0.50	0.18
1330-20-7	Xylenes, Total	110		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	119		70-130
1868-53-7	Dibromofluoromethane (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-03.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 08-Jun-2015 11:23:30 ALS Bottle#: 3 Worklist Smp#: 3  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: lcs  
 Misc. Info.: 490-0056175-003  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:38:21 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:38:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.451	3.450	0.001	99	450431	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.714	0.001	84	345200	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.822	7.821	0.001	92	178497	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.025	0.001	94	102716	25.0	23.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.237	0.001	0	89983	25.0	23.5	
\$ 6 Toluene-d8 (Surr)	98	4.556	4.555	0.001	92	417646	25.0	24.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.748	0.001	94	157632	25.0	29.9	
10 Dichlorodifluoromethane	85	1.061	1.065	-0.004	99	268820	50.0	52.5	
11 Chloromethane	50	1.170	1.174	-0.004	99	238659	50.0	54.2	
12 Vinyl chloride	62	1.213	1.212	0.001	98	293146	50.0	57.8	
13 Butadiene	54	1.230	1.229	0.001	87	270591	50.0	60.0	
14 Bromomethane	96	1.382	1.381	0.001	90	150421	50.0	41.0	
15 Chloroethane	64	1.431	1.430	0.001	99	180778	50.0	56.1	
16 Dichlorofluoromethane	67	1.524	1.523	0.001	97	434359	50.0	53.5	
17 Trichlorofluoromethane	101	1.551	1.555	-0.004	98	396062	50.0	46.7	
18 Ethanol	45	1.660	1.653	0.007	98	17534	2000.0	2166.4	
19 Ethyl ether	59	1.692	1.691	0.001	88	145605	50.0	51.1	
20 Acrolein	56	1.763	1.768	-0.005	99	41271	125.0	124.7	
21 1,1,2-Trichloro-1,2,2-trif	101	1.807	1.806	0.001	94	239387	50.0	46.7	
22 1,1-Dichloroethene	96	1.812	1.811	0.001	97	235086	50.0	49.8	
23 Acetone	58	1.845	1.844	0.001	100	40712	250.0	242.9	
24 Iodomethane	142	1.899	1.898	0.001	97	211818	50.0	31.6	
25 Isopropyl alcohol	45	1.910	1.909	0.001	99	45508	500.0	496.0	
26 Carbon disulfide	76	1.932	1.931	0.001	98	601053	50.0	48.4	
28 Acetonitrile	41	1.992	1.991	0.001	86	411359	500.0	516.9	
29 3-Chloro-1-propene	76	1.992	1.991	0.001	93	225414	NC	NC	
30 Methyl acetate	43	2.003	2.002	0.001	97	377584	250.0	239.3	
31 Methylene Chloride	84	2.057	2.056	0.001	86	238155	50.0	52.0	
32 2-Methyl-2-propanol	59	2.117	2.116	0.001	99	76729	500.0	472.7	
33 Acrylonitrile	53	2.188	2.187	0.001	99	376974	500.0	486.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.199	2.198	0.001	94	440990	50.0	46.7	
34 trans-1,2-Dichloroethene	61	2.193	2.198	-0.005	86	314265	50.0	50.2	
36 Hexane	57	2.335	2.334	0.001	88	341315	50.0	52.0	
37 1,1-Dichloroethane	63	2.422	2.421	0.001	96	421960	50.0	49.9	
39 Vinyl acetate	43	2.449	2.448	0.001	97	763947	100.0	96.9	
38 Isopropyl ether	45	2.454	2.454	0.000	83	614991	50.0	50.0	
40 2-Chloro-1,3-butadiene	53	2.471	2.470	0.001	89	351077	50.0	49.8	
41 Tert-butyl ethyl ether	59	2.656	2.655	0.001	97	549084	50.0	48.4	
42 cis-1,2-Dichloroethene	61	2.748	2.747	0.001	80	356288	50.0	47.6	
43 2,2-Dichloropropane	77	2.748	2.747	0.001	75	361053	50.0	49.4	
44 2-Butanone (MEK)	72	2.765	2.764	0.001	97	60731	250.0	230.2	
45 Ethyl acetate	43	2.786	2.786	0.000	98	189000	100.0	94.9	
46 Propionitrile	54	2.797	2.802	-0.005	99	133605	500.0	470.7	
47 Methacrylonitrile	41	2.884	2.884	0.000	90	619903	500.0	482.8	
48 Chlorobromomethane	130	2.890	2.889	0.001	83	136961	50.0	44.2	
50 Chloroform	83	2.928	2.927	0.001	92	410811	50.0	48.0	
49 Tetrahydrofuran	42	2.928	2.927	0.001	73	53457	100.0	89.4	
51 1,1,1-Trichloroethane	97	3.042	3.041	0.001	98	364961	50.0	44.8	
53 Cyclohexane	56	3.075	3.074	0.001	86	406457	50.0	49.4	
55 Carbon tetrachloride	117	3.146	3.145	0.001	91	321259	50.0	44.7	
54 1,1-Dichloropropene	75	3.146	3.145	0.001	97	335774	50.0	48.5	
56 Isobutyl alcohol	43	3.222	3.221	0.001	95	77318	1250.0	1108.8	
57 Benzene	78	3.276	3.275	0.001	95	1001040	50.0	48.9	
58 t-Amyl alcohol	59	3.282	3.281	0.001	67	59465	500.0	418.1	
59 1,2-Dichloroethane	62	3.287	3.286	0.001	98	230792	50.0	43.0	
60 Tert-amyl methyl ether	73	3.342	3.341	0.001	95	465549	50.0	46.2	
61 n-Heptane	43	3.423	3.422	0.001	92	287575	50.0	50.1	
62 n-Butanol	56	3.663	3.662	0.001	85	54147	1250.0	1153.0	
63 Trichloroethene	130	3.690	3.689	0.001	97	274043	50.0	45.8	
64 Ethyl acrylate	55	3.766	3.765	0.001	99	129923	50.0	49.8	
65 Methylcyclohexane	83	3.815	3.814	0.001	86	430821	50.0	46.7	
66 1,2-Dichloropropane	63	3.842	3.842	0.000	96	223362	50.0	47.9	
68 Dibromomethane	93	3.924	3.923	0.001	94	100559	50.0	43.6	
67 Methyl methacrylate	41	3.924	3.923	0.001	88	184493	100.0	91.2	
69 1,4-Dioxane	88	3.957	3.956	0.001	96	17730	1000.0	993.7	
71 Dichlorobromomethane	83	4.028	4.027	0.001	99	284798	50.0	46.5	
72 2-Nitropropane	43	4.202	4.201	0.001	96	51632	100.0	86.6	
73 2-Chloroethyl vinyl ether	63	4.251	4.250	0.001	91	78002	50.0	43.1	
74 cis-1,3-Dichloropropene	75	4.354	4.353	0.001	97	337896	50.0	48.1	
75 4-Methyl-2-pentanone (MIBK)	58	4.479	4.478	0.001	94	187883	250.0	225.5	
76 Toluene	91	4.605	4.604	0.001	98	1057760	50.0	45.1	
77 trans-1,3-Dichloropropene	75	4.773	4.772	0.001	91	252760	50.0	47.1	
78 Ethyl methacrylate	69	4.850	4.854	-0.004	86	181580	50.0	45.6	
79 1,1,2-Trichloroethane	97	4.915	4.919	-0.004	90	143842	50.0	41.9	
80 Tetrachloroethene	166	5.029	5.028	0.001	97	275443	50.0	41.8	
81 1,3-Dichloropropane	76	5.051	5.050	0.001	86	269288	50.0	47.4	
82 2-Hexanone	58	5.133	5.132	0.001	93	185499	250.0	275.5	
83 Chlorodibromomethane	127	5.231	5.230	0.001	90	153745	50.0	52.3	
84 n-Butyl acetate	43	5.236	5.235	0.001	97	136350	50.0	53.3	
85 Ethylene Dibromide	107	5.329	5.328	0.001	99	154992	50.0	50.4	
86 1-Chlorohexane	91	5.715	5.720	-0.005	93	378413	50.0	53.1	
87 Chlorobenzene	112	5.737	5.736	0.001	96	740919	50.0	49.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.802	5.807	-0.005	96	255302	50.0	51.4	
89 Ethylbenzene	91	5.829	5.828	0.001	97	1269223	50.0	54.1	
90 m-Xylene & p-Xylene	91	5.933	5.932	0.001	0	998299	50.0	54.4	
91 o-Xylene	91	6.281	6.280	0.001	96	1009720	50.0	55.4	
92 Styrene	104	6.292	6.297	-0.005	93	798536	50.0	55.1	
93 Bromoform	173	6.455	6.454	0.001	98	100383	50.0	49.9	
94 Isopropylbenzene	105	6.608	6.612	-0.004	95	1243518	50.0	54.4	
95 Cyclohexanone	55	6.706	6.705	0.001	89	55735	500.0	794.5	E
96 Bromobenzene	77	6.880	6.879	0.001	89	386784	50.0	55.3	
97 1,1,2,2-Tetrachloroethane	83	6.891	6.890	0.001	93	153657	50.0	51.9	
98 1,2,3-Trichloropropane	110	6.929	6.928	0.001	82	47820	50.0	51.4	
99 trans-1,4-Dichloro-2-butene	53	6.951	6.950	0.001	82	37248	50.0	58.2	
100 N-Propylbenzene	91	6.989	6.988	0.001	98	1431100	50.0	59.3	
101 2-Chlorotoluene	91	7.060	7.059	0.001	97	844446	50.0	56.4	
102 1,3,5-Trimethylbenzene	105	7.158	7.157	0.001	95	1038760	50.0	58.7	
103 4-Chlorotoluene	91	7.163	7.162	0.001	98	977751	50.0	56.8	
104 tert-Butylbenzene	119	7.451	7.456	-0.005	92	875809	50.0	57.2	
106 1,2,4-Trimethylbenzene	105	7.506	7.505	0.001	97	1048744	50.0	59.1	
107 sec-Butylbenzene	105	7.658	7.663	-0.005	94	1291113	50.0	58.2	
108 1,3-Dichlorobenzene	146	7.756	7.755	0.001	98	547172	50.0	53.5	
109 4-Isopropyltoluene	119	7.805	7.804	0.001	96	1122854	50.0	57.0	
110 1,4-Dichlorobenzene	146	7.843	7.843	0.000	96	552838	50.0	49.9	
111 1,2,3-Trimethylbenzene	105	7.898	7.897	0.001	98	995037	50.0	55.4	
112 Benzyl chloride	91	7.980	7.984	-0.004	98	284765	50.0	47.4	
113 1,2-Dichlorobenzene	146	8.192	8.191	0.001	97	473463	50.0	50.9	
114 n-Butylbenzene	91	8.197	8.196	0.001	97	938896	50.0	60.2	
115 1,2-Dibromo-3-Chloropropan	157	8.954	8.953	0.001	91	28187	50.0	52.3	
116 1,3,5-Trichlorobenzene	180	9.150	9.149	0.001	98	369469	50.0	54.2	
117 1,2,4-Trichlorobenzene	180	9.776	9.780	-0.004	94	278051	50.0	53.1	
118 Hexachlorobutadiene	225	9.977	9.976	0.001	97	138220	50.0	49.5	
119 Naphthalene	128	10.053	10.053	0.000	96	440351	50.0	50.7	
120 1,2,3-Trichlorobenzene	180	10.353	10.352	0.001	96	212160	50.0	51.6	
S 137 1,2-Dichloroethene, Total	1				0		100.0	97.8	
S 138 Trihalomethanes, Total	1				0		200.0	196.8	
S 134 Xylenes, Total	1				0		100.0	109.7	
S 135 1,3-Dichloropropene, Total	1				0		100.0	95.2	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

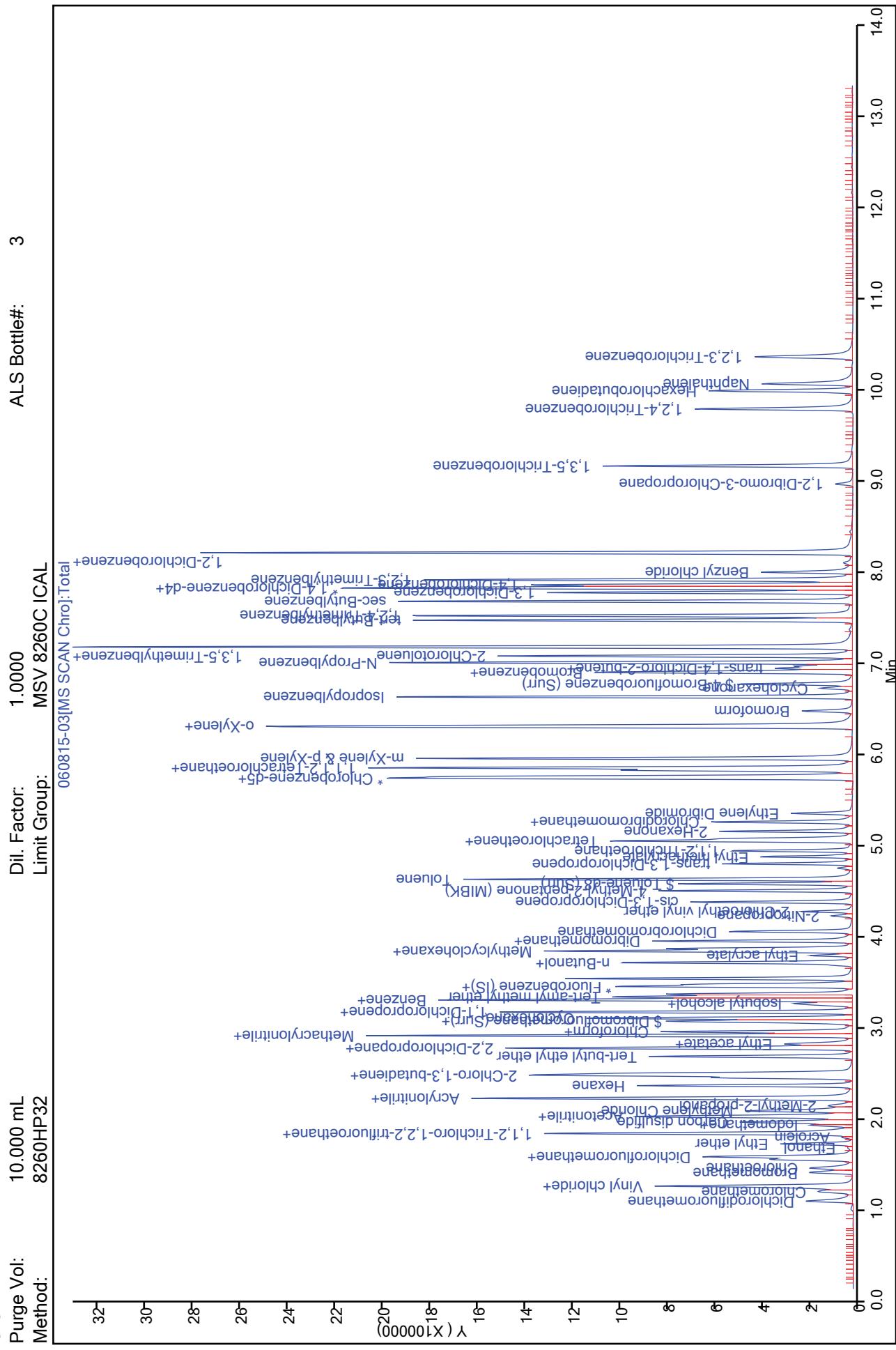
**Reagents:**

V1_gases_I_00108	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:39:01

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32120150608-56175.b\\060815-03.D  
Injection Date: 08-Jun-2015 11:23:30  
Lims ID: LCS  
Instrument ID: HP32



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-253850/4

Matrix: Water

Lab File ID: 060515-04.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 12:16

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	232		5.0	2.7
71-43-2	Benzene	48.2		0.50	0.20
75-25-2	Bromoform	52.4		0.50	0.29
74-83-9	Bromomethane	44.0		0.50	0.35
78-93-3	2-Butanone (MEK)	251		50	2.6
75-15-0	Carbon disulfide	43.6		0.50	0.22
56-23-5	Carbon tetrachloride	47.2		0.50	0.18
108-90-7	Chlorobenzene	49.5		0.50	0.18
124-48-1	Chlorodibromomethane	53.0		0.50	0.25
75-00-3	Chloroethane	51.3		0.50	0.36
67-66-3	Chloroform	49.7		0.50	0.23
74-87-3	Chloromethane	45.0		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	47.6		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	50.5		0.50	0.17
110-82-7	Cyclohexane	47.0		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	52.1		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.0		0.50	0.19
541-73-1	1,3-Dichlorobenzene	52.6		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.4		0.50	0.17
75-27-4	Dichlorobromomethane	48.2		0.50	0.17
75-71-8	Dichlorodifluoromethane	46.5		0.50	0.17
75-34-3	1,1-Dichloroethane	48.6		0.50	0.24
107-06-2	1,2-Dichloroethane	45.3		0.50	0.20
75-35-4	1,1-Dichloroethene	46.0		0.50	0.25
78-87-5	1,2-Dichloropropane	46.8		0.50	0.25
100-41-4	Ethylbenzene	52.7		0.50	0.19
106-93-4	1,2-Dibromoethane	50.7		0.50	0.21
591-78-6	2-Hexanone	280		5.0	1.3
98-82-8	Isopropylbenzene	54.0		1.0	0.33
79-20-9	Methyl acetate	239		10	0.58
108-87-2	Methylcyclohexane	47.3		0.50	0.090
75-09-2	Methylene Chloride	50.2		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	247		5.0	0.81
1634-04-4	Methyl tert-butyl ether	48.0		0.50	0.17
100-42-5	Styrene	55.0		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	50.2		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-253850/4

Matrix: Water

Lab File ID: 060515-04.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 12:16

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	45.8		0.50	0.14
108-88-3	Toluene	48.0		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	48.4		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	51.0		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	54.7		0.50	0.20
71-55-6	1,1,1-Trichloroethane	45.9		0.50	0.19
79-00-5	1,1,2-Trichloroethane	46.9		0.50	0.19
79-01-6	Trichloroethene	46.7		0.50	0.20
75-69-4	Trichlorofluoromethane	45.8		0.50	0.21
76-13-1	Freon-113	44.9		1.0	0.15
75-01-4	Vinyl chloride	48.5		0.50	0.18
1330-20-7	Xylenes, Total	107		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		70-130
1868-53-7	Dibromofluoromethane (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	104		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-04.D  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 05-Jun-2015 12:16:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: lcsd  
 Misc. Info.: 490-0056059-004  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:00:19 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:01:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.449	3.447	0.002	99	395230	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.713	5.711	0.002	84	292551	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.820	7.823	-0.003	94	163065	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.024	3.028	-0.004	94	95071	25.0	25.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.236	3.240	-0.004	0	83709	25.0	25.0	
\$ 6 Toluene-d8 (Surr)	98	4.554	4.552	0.002	92	378937	25.0	26.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.753	6.751	0.002	96	130200	25.0	27.0	
10 Dichlorodifluoromethane	85	1.064	1.063	0.001	99	208969	50.0	46.5	
11 Chloromethane	50	1.168	1.177	-0.009	98	174053	50.0	45.0	
12 Vinyl chloride	62	1.211	1.215	-0.004	98	215545	50.0	48.5	
13 Butadiene	54	1.228	1.231	-0.003	88	195181	50.0	49.3	
14 Bromomethane	96	1.380	1.378	0.002	90	141467	50.0	44.0	
15 Chloroethane	64	1.429	1.427	0.002	99	145217	50.0	51.3	
16 Dichlorofluoromethane	67	1.522	1.520	0.002	97	352881	50.0	49.6	
17 Trichlorofluoromethane	101	1.554	1.552	0.002	98	341127	50.0	45.8	
18 Ethanol	45	1.658	1.661	-0.003	99	16186	2000.0	2280.2	
19 Ethyl ether	59	1.696	1.694	0.002	88	118983	50.0	47.6	
20 Acrolein	56	1.766	1.765	0.001	99	32606	125.0	112.3	
21 1,1,2-Trichloro-1,2,2-trif	101	1.805	1.803	0.002	94	202296	50.0	44.9	
22 1,1-Dichloroethene	96	1.810	1.808	0.002	97	190563	50.0	46.0	
23 Acetone	58	1.843	1.846	-0.003	100	34126	250.0	232.0	
24 Iodomethane	142	1.897	1.895	0.002	98	177884	50.0	30.2	
25 Isopropyl alcohol	45	1.908	1.912	-0.004	100	38680	500.0	480.3	
26 Carbon disulfide	76	1.935	1.934	0.001	99	474888	50.0	43.6	
28 Acetonitrile	41	1.990	1.988	0.002	75	335439	500.0	480.4	
29 3-Chloro-1-propene	76	1.990	1.993	-0.003	92	180722	NC	NC	
30 Methyl acetate	43	2.001	2.004	-0.003	96	331015	250.0	239.1	
31 Methylene Chloride	84	2.055	2.053	0.002	86	201844	50.0	50.2	
32 2-Methyl-2-propanol	59	2.115	2.119	-0.004	99	68222	500.0	479.0	
33 Acrylonitrile	53	2.186	2.189	-0.003	99	336329	500.0	494.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.197	2.195	0.002	97	266049	50.0	48.4	
35 Methyl tert-butyl ether	73	2.197	2.195	0.002	94	397770	50.0	48.0	
36 Hexane	57	2.333	2.336	-0.003	90	284233	50.0	49.4	
37 1,1-Dichloroethane	63	2.420	2.423	-0.003	96	360530	50.0	48.6	
39 Vinyl acetate	43	2.447	2.445	0.002	98	682674	100.0	98.7	
38 Isopropyl ether	45	2.452	2.451	0.001	84	533282	50.0	49.4	
40 2-Chloro-1,3-butadiene	53	2.469	2.472	-0.003	90	299677	50.0	48.5	
41 Tert-butyl ethyl ether	59	2.654	2.658	-0.004	97	475174	50.0	47.8	
43 2,2-Dichloropropane	77	2.746	2.745	0.001	75	319726	50.0	49.8	
42 cis-1,2-Dichloroethene	61	2.746	2.745	0.001	79	312908	50.0	47.6	
44 2-Butanone (MEK)	72	2.763	2.766	-0.003	97	58025	250.0	250.7	
45 Ethyl acetate	43	2.784	2.788	-0.004	98	182894	100.0	104.6	
46 Propionitrile	54	2.801	2.799	0.002	99	122887	500.0	493.4	
47 Methacrylonitrile	41	2.882	2.886	-0.004	90	533644	500.0	473.7	
48 Chlorobromomethane	130	2.888	2.886	0.002	78	129327	50.0	47.5	
50 Chloroform	83	2.926	2.924	0.002	92	372525	50.0	49.7	
49 Tetrahydrofuran	42	2.926	2.930	-0.004	73	50301	100.0	95.9	
51 1,1,1-Trichloroethane	97	3.046	3.044	0.002	97	328045	50.0	45.9	
53 Cyclohexane	56	3.078	3.077	0.001	87	339217	50.0	47.0	
55 Carbon tetrachloride	117	3.144	3.142	0.002	95	297720	50.0	47.2	
54 1,1-Dichloropropene	75	3.144	3.142	0.002	96	291957	50.0	48.1	
56 Isobutyl alcohol	43	3.220	3.224	-0.004	95	71746	1250.0	1172.5	
57 Benzene	78	3.274	3.273	0.001	95	865483	50.0	48.2	
58 t-Amyl alcohol	59	3.280	3.283	-0.003	73	54729	500.0	438.6	
59 1,2-Dichloroethane	62	3.285	3.283	0.002	98	212991	50.0	45.3	
60 Tert-amyl methyl ether	73	3.340	3.343	-0.003	98	407985	50.0	46.2	
61 n-Heptane	43	3.427	3.425	0.002	88	251907	50.0	50.1	
62 n-Butanol	56	3.661	3.665	-0.004	85	47685	1250.0	1157.2	
63 Trichloroethene	130	3.688	3.686	0.002	97	244842	50.0	46.7	
64 Ethyl acrylate	55	3.764	3.763	0.001	99	113066	50.0	49.4	
65 Methylcyclohexane	83	3.813	3.812	0.001	86	383213	50.0	47.3	
66 1,2-Dichloropropane	63	3.840	3.844	-0.004	95	191541	50.0	46.8	
67 Methyl methacrylate	41	3.922	3.920	0.002	88	169035	100.0	95.2	
68 Dibromomethane	93	3.928	3.926	0.002	92	94088	50.0	46.5	
69 1,4-Dioxane	88	3.955	3.958	-0.003	96	15024	1000.0	959.6	
71 Dichlorobromomethane	83	4.031	4.029	0.002	99	258764	50.0	48.2	
72 2-Nitropropane	43	4.200	4.198	0.002	97	48897	100.0	93.5	
73 2-Chloroethyl vinyl ether	63	4.249	4.247	0.002	92	69581	50.0	45.4	
74 cis-1,3-Dichloropropene	75	4.352	4.356	-0.004	97	300373	50.0	50.5	
75 4-Methyl-2-pentanone (MIBK)	58	4.477	4.481	-0.004	94	174785	250.0	247.5	
76 Toluene	91	4.603	4.606	-0.003	99	954857	50.0	48.0	
77 trans-1,3-Dichloropropene	75	4.777	4.775	0.002	91	231782	50.0	51.0	
78 Ethyl methacrylate	69	4.853	4.851	0.002	87	164841	50.0	48.9	
79 1,1,2-Trichloroethane	97	4.918	4.917	0.001	90	136432	50.0	46.9	
80 Tetrachloroethene	166	5.027	5.025	0.002	98	255707	50.0	45.8	
81 1,3-Dichloropropane	76	5.054	5.053	0.001	87	236851	50.0	49.2	
82 2-Hexanone	58	5.131	5.134	-0.003	94	159885	250.0	280.1	
83 Chlorodibromomethane	127	5.234	5.232	0.002	89	131981	50.0	53.0	
84 n-Butyl acetate	43	5.239	5.238	0.001	98	123880	50.0	55.2	
85 Ethylene Dibromide	107	5.327	5.330	-0.003	99	132053	50.0	50.7	
86 1-Chlorohexane	91	5.718	5.717	0.001	92	314605	50.0	50.3	
87 Chlorobenzene	112	5.735	5.739	-0.003	96	622776	50.0	49.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.806	5.804	0.002	95	214551	50.0	50.9	
89 Ethylbenzene	91	5.833	5.831	0.002	97	1047661	50.0	52.7	
90 m-Xylene & p-Xylene	91	5.936	5.934	0.002	0	816520	50.0	52.5	
91 o-Xylene	91	6.279	6.277	0.002	96	844586	50.0	54.6	
92 Styrene	104	6.295	6.294	0.001	94	675515	50.0	55.0	
93 Bromoform	173	6.453	6.457	-0.004	98	89395	50.0	52.4	
94 Isopropylbenzene	105	6.611	6.609	0.002	95	1046506	50.0	54.0	
95 Cyclohexanone	55	6.704	6.707	-0.003	90	39359	500.0	639.6	E
96 Bromobenzene	77	6.878	6.876	0.002	88	318593	50.0	49.9	
97 1,1,2,2-Tetrachloroethane	83	6.894	6.893	0.001	94	135764	50.0	50.2	
98 1,2,3-Trichloropropane	110	6.927	6.925	0.002	82	43088	50.0	50.7	
99 trans-1,4-Dichloro-2-butene	53	6.949	6.952	-0.003	80	32681	50.0	55.9	
100 N-Propylbenzene	91	6.987	6.991	-0.003	98	1223601	50.0	55.5	
101 2-Chlorotoluene	91	7.058	7.061	-0.003	98	707265	50.0	51.7	
102 1,3,5-Trimethylbenzene	105	7.156	7.159	-0.003	97	897071	50.0	55.5	
103 4-Chlorotoluene	91	7.161	7.165	-0.004	98	847982	50.0	53.9	
104 tert-Butylbenzene	119	7.455	7.453	0.002	92	763941	50.0	54.6	
106 1,2,4-Trimethylbenzene	105	7.504	7.502	0.002	96	906129	50.0	55.9	
107 sec-Butylbenzene	105	7.662	7.660	0.002	94	1132214	50.0	55.9	
108 1,3-Dichlorobenzene	146	7.760	7.758	0.002	98	491944	50.0	52.6	
109 4-Isopropyltoluene	119	7.809	7.807	0.002	96	1003738	50.0	55.8	
110 1,4-Dichlorobenzene	146	7.841	7.845	-0.004	96	499766	50.0	49.4	
111 1,2,3-Trimethylbenzene	105	7.896	7.900	-0.004	98	875269	50.0	53.4	
112 Benzyl chloride	91	7.983	7.981	0.002	98	256562	50.0	50.4	
113 1,2-Dichlorobenzene	146	8.195	8.194	0.001	97	433670	50.0	51.0	
114 n-Butylbenzene	91	8.195	8.199	-0.004	97	842946	50.0	59.1	
115 1,2-Dibromo-3-Chloropropan	157	8.952	8.950	0.002	92	25626	50.0	52.1	
116 1,3,5-Trichlorobenzene	180	9.153	9.152	0.001	98	339191	50.0	54.4	
117 1,2,4-Trichlorobenzene	180	9.779	9.778	0.001	94	261739	50.0	54.7	
118 Hexachlorobutadiene	225	9.975	9.979	-0.004	97	132183	50.0	51.8	
119 Naphthalene	128	10.057	10.055	0.002	96	413831	50.0	52.1	
120 1,2,3-Trichlorobenzene	180	10.351	10.349	0.002	96	208312	50.0	55.4	
S 134 Xylenes, Total	1				0		100.0	107.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	101.5	
S 137 1,2-Dichloroethene, Total	1				0		100.0	96.1	
S 138 Trihalomethanes, Total	1				0		200.0	203.3	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-254074/4

Matrix: Water

Lab File ID: 060515-31.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 00:59

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	239		5.0	2.7
71-43-2	Benzene	47.5		0.50	0.20
75-25-2	Bromoform	50.9		0.50	0.29
74-83-9	Bromomethane	41.3		0.50	0.35
78-93-3	2-Butanone (MEK)	233		50	2.6
75-15-0	Carbon disulfide	42.0		0.50	0.22
56-23-5	Carbon tetrachloride	45.3		0.50	0.18
108-90-7	Chlorobenzene	48.6		0.50	0.18
124-48-1	Chlorodibromomethane	51.6		0.50	0.25
75-00-3	Chloroethane	49.8		0.50	0.36
67-66-3	Chloroform	46.9		0.50	0.23
74-87-3	Chloromethane	43.3		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	44.2		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	46.8		0.50	0.17
110-82-7	Cyclohexane	45.9		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	53.3		5.0	0.94
95-50-1	1,2-Dichlorobenzene	49.2		0.50	0.19
541-73-1	1,3-Dichlorobenzene	51.6		0.50	0.18
106-46-7	1,4-Dichlorobenzene	48.1		0.50	0.17
75-27-4	Dichlorobromomethane	46.9		0.50	0.17
75-71-8	Dichlorodifluoromethane	45.6		0.50	0.17
75-34-3	1,1-Dichloroethane	45.8		0.50	0.24
107-06-2	1,2-Dichloroethane	44.2		0.50	0.20
75-35-4	1,1-Dichloroethene	45.4		0.50	0.25
78-87-5	1,2-Dichloropropane	47.6		0.50	0.25
100-41-4	Ethylbenzene	51.8		0.50	0.19
106-93-4	1,2-Dibromoethane	49.9		0.50	0.21
591-78-6	2-Hexanone	279		5.0	1.3
98-82-8	Isopropylbenzene	52.8		1.0	0.33
79-20-9	Methyl acetate	231		10	0.58
108-87-2	Methylcyclohexane	46.0		0.50	0.090
75-09-2	Methylene Chloride	48.3		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	235		5.0	0.81
1634-04-4	Methyl tert-butyl ether	45.9		0.50	0.17
100-42-5	Styrene	53.9		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	50.8		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-254074/4

Matrix: Water

Lab File ID: 060515-31.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/06/2015 00:59

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	40.8		0.50	0.14
108-88-3	Toluene	44.2		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	46.3		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	46.5		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	52.8		0.50	0.20
71-55-6	1,1,1-Trichloroethane	44.9		0.50	0.19
79-00-5	1,1,2-Trichloroethane	42.7		0.50	0.19
79-01-6	Trichloroethene	46.1		0.50	0.20
75-69-4	Trichlorofluoromethane	43.7		0.50	0.21
76-13-1	Freon-113	43.8		1.0	0.15
75-01-4	Vinyl chloride	48.4		0.50	0.18
1330-20-7	Xylenes, Total	105		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	116		70-130
1868-53-7	Dibromofluoromethane (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060515-31.D  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 06-Jun-2015 00:59:30 ALS Bottle#: 31 Worklist Smp#: 4  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: LCSD  
 Misc. Info.: 490-0056110-004  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 09:41:32 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 09:42:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.447	0.000	99	431727	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.711	5.712	-0.001	84	338326	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.823	7.824	-0.001	94	180131	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.028	0.000	93	101692	25.0	24.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.241	-0.001	0	89090	25.0	24.3	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.552	0.000	92	419072	25.0	24.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.752	-0.001	95	154166	25.0	28.9	
10 Dichlorodifluoromethane	85	1.063	1.063	0.000	99	223595	50.0	45.6	
11 Chloromethane	50	1.172	1.177	-0.005	99	182872	50.0	43.3	
12 Vinyl chloride	62	1.215	1.216	-0.001	98	235256	50.0	48.4	
13 Butadiene	54	1.231	1.232	-0.001	89	214591	50.0	49.6	
14 Bromomethane	96	1.378	1.379	-0.001	91	145205	50.0	41.3	
15 Chloroethane	64	1.427	1.428	-0.001	99	153786	50.0	49.8	
16 Dichlorofluoromethane	67	1.525	1.526	-0.001	97	380073	50.0	48.9	
17 Trichlorofluoromethane	101	1.553	1.553	0.000	98	355908	50.0	43.7	
18 Ethanol	45	1.651	1.651	0.000	97	16908	2000.0	2179.6	
19 Ethyl ether	59	1.694	1.695	-0.001	87	128619	50.0	47.1	
20 Acrolein	56	1.765	1.771	-0.006	99	36981	125.0	116.6	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.803	0.000	94	215136	50.0	43.8	
22 1,1-Dichloroethene	96	1.814	1.814	0.000	97	205218	50.0	45.4	
23 Acetone	58	1.847	1.842	0.005	100	38412	250.0	239.1	
24 Iodomethane	142	1.896	1.896	0.000	97	184700	50.0	28.7	
25 Isopropyl alcohol	45	1.912	1.912	0.000	100	42242	500.0	480.2	
26 Carbon disulfide	76	1.934	1.934	0.000	100	500269	50.0	42.0	
28 Acetonitrile	41	1.988	1.994	-0.006	76	361227	500.0	473.6	
29 3-Chloro-1-propene	76	1.994	1.994	0.000	93	199813	NC	NC	
30 Methyl acetate	43	2.004	2.005	-0.001	96	349747	250.0	231.3	
31 Methylene Chloride	84	2.059	2.059	0.000	87	212427	50.0	48.3	
32 2-Methyl-2-propanol	59	2.119	2.114	0.005	99	72888	500.0	468.5	
33 Acrylonitrile	53	2.189	2.190	-0.001	99	350763	500.0	472.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.195	2.195	0.000	97	277871	50.0	46.3	
35 Methyl tert-butyl ether	73	2.195	2.195	0.000	94	415669	50.0	45.9	
36 Hexane	57	2.336	2.337	-0.001	89	272381	50.0	43.3	
37 1,1-Dichloroethane	63	2.424	2.424	0.000	96	371240	50.0	45.8	
39 Vinyl acetate	43	2.445	2.446	-0.001	97	697422	100.0	92.3	
38 Isopropyl ether	45	2.451	2.451	0.000	82	560026	50.0	47.5	
40 2-Chloro-1,3-butadiene	53	2.473	2.473	0.000	90	308398	50.0	45.7	
41 Tert-butyl ethyl ether	59	2.658	2.658	0.000	97	505040	50.0	46.5	
43 2,2-Dichloropropane	77	2.745	2.745	0.000	70	288251	50.0	41.1	
42 cis-1,2-Dichloroethene	61	2.745	2.745	0.000	80	317387	50.0	44.2	
44 2-Butanone (MEK)	72	2.761	2.762	-0.001	98	58931	250.0	233.1	
45 Ethyl acetate	43	2.788	2.789	-0.001	98	172141	100.0	90.2	
46 Propionitrile	54	2.799	2.800	-0.001	99	125294	500.0	460.5	
47 Methacrylonitrile	41	2.886	2.881	0.005	90	558327	500.0	453.7	
48 Chlorobromomethane	130	2.886	2.887	-0.001	78	131756	50.0	44.3	
50 Chloroform	83	2.930	2.930	0.000	92	384526	50.0	46.9	
49 Tetrahydrofuran	42	2.930	2.930	0.000	88	51115	100.0	89.2	
51 1,1,1-Trichloroethane	97	3.044	3.045	-0.001	97	350553	50.0	44.9	
53 Cyclohexane	56	3.077	3.077	0.000	87	362310	50.0	45.9	
54 1,1-Dichloropropene	75	3.142	3.143	-0.001	96	308097	50.0	46.5	
55 Carbon tetrachloride	117	3.148	3.148	0.000	94	312411	50.0	45.3	
56 Isobutyl alcohol	43	3.224	3.219	0.005	95	77794	1250.0	1163.9	
57 Benzene	78	3.273	3.273	0.000	95	931561	50.0	47.5	
58 t-Amyl alcohol	59	3.284	3.284	0.000	72	59234	500.0	434.5	
59 1,2-Dichloroethane	62	3.284	3.284	0.000	98	227213	50.0	44.2	
60 Tert-amyl methyl ether	73	3.343	3.344	-0.001	98	448913	50.0	46.5	
61 n-Heptane	43	3.425	3.426	-0.001	95	234315	50.0	42.6	
62 n-Butanol	56	3.665	3.660	0.005	84	54608	1250.0	1213.2	
63 Trichloroethene	130	3.686	3.687	-0.001	97	264070	50.0	46.1	
64 Ethyl acrylate	55	3.763	3.763	0.000	99	132544	50.0	53.0	
65 Methylcyclohexane	83	3.817	3.818	-0.001	87	407088	50.0	46.0	
66 1,2-Dichloropropane	63	3.844	3.845	-0.001	96	212465	50.0	47.6	
67 Methyl methacrylate	41	3.920	3.921	-0.001	87	184487	100.0	95.1	
68 Dibromomethane	93	3.926	3.926	0.000	91	97928	50.0	44.3	
69 1,4-Dioxane	88	3.959	3.954	0.005	96	16804	1000.0	982.6	
71 Dichlorobromomethane	83	4.029	4.030	-0.001	99	275081	50.0	46.9	
72 2-Nitropropane	43	4.198	4.204	-0.006	97	52878	100.0	92.5	
73 2-Chloroethyl vinyl ether	63	4.247	4.248	-0.001	91	76171	50.0	43.0	
74 cis-1,3-Dichloropropene	75	4.351	4.356	-0.005	97	321967	50.0	46.8	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.476	0.000	94	191909	250.0	235.0	
76 Toluene	91	4.601	4.601	0.000	99	1016995	50.0	44.2	
77 trans-1,3-Dichloropropene	75	4.775	4.776	-0.001	90	244677	50.0	46.5	
78 Ethyl methacrylate	69	4.851	4.852	-0.001	87	183913	50.0	47.2	
79 1,1,2-Trichloroethane	97	4.917	4.917	0.000	90	143585	50.0	42.7	
80 Tetrachloroethene	166	5.026	5.026	0.000	97	263629	50.0	40.8	
81 1,3-Dichloropropane	76	5.053	5.053	0.000	86	263365	50.0	47.3	
82 2-Hexanone	58	5.129	5.129	0.000	93	184096	250.0	278.9	
83 Chlorodibromomethane	127	5.232	5.233	-0.001	90	148710	50.0	51.6	
84 n-Butyl acetate	43	5.238	5.238	0.000	97	139932	50.0	57.1	
85 Ethylene Dibromide	107	5.330	5.331	-0.001	99	150334	50.0	49.9	
86 1-Chlorohexane	91	5.717	5.717	0.000	92	354011	50.0	51.9	
87 Chlorobenzene	112	5.733	5.739	-0.006	96	707099	50.0	48.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.804	5.804	0.000	96	245993	50.0	50.5	
89 Ethylbenzene	91	5.831	5.832	-0.001	97	1191102	50.0	51.8	
90 m-Xylene & p-Xylene	91	5.935	5.935	0.000	0	931396	50.0	51.8	
91 o-Xylene	91	6.278	6.278	0.000	96	953377	50.0	53.3	
92 Styrene	104	6.294	6.294	0.000	94	766491	50.0	53.9	
93 Bromoform	173	6.457	6.458	-0.001	98	100430	50.0	50.9	
94 Isopropylbenzene	105	6.610	6.610	0.000	95	1182766	50.0	52.8	
95 Cyclohexanone	55	6.702	6.708	-0.006	89	64661	500.0	961.6	E
96 Bromobenzene	77	6.876	6.877	-0.001	90	361793	50.0	51.3	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.893	0.000	94	151941	50.0	50.8	
98 1,2,3-Trichloropropane	110	6.925	6.926	-0.001	80	47742	50.0	50.9	
99 trans-1,4-Dichloro-2-butene	53	6.952	6.948	0.004	83	33240	50.0	51.4	
100 N-Propylbenzene	91	6.985	6.986	-0.001	98	1349025	50.0	55.4	
101 2-Chlorotoluene	91	7.061	7.062	-0.001	98	793314	50.0	52.5	
103 4-Chlorotoluene	91	7.159	7.160	-0.001	98	933339	50.0	53.7	
102 1,3,5-Trimethylbenzene	105	7.154	7.160	-0.006	95	990965	50.0	55.5	
104 tert-Butylbenzene	119	7.453	7.454	-0.001	92	848044	50.0	54.9	
106 1,2,4-Trimethylbenzene	105	7.502	7.503	-0.001	96	1001517	50.0	55.9	
107 sec-Butylbenzene	105	7.660	7.661	-0.001	94	1238867	50.0	55.3	
108 1,3-Dichlorobenzene	146	7.758	7.759	-0.001	98	532971	50.0	51.6	
109 4-Isopropyltoluene	119	7.807	7.808	-0.001	96	1075730	50.0	54.2	
110 1,4-Dichlorobenzene	146	7.845	7.846	-0.001	97	538105	50.0	48.1	
111 1,2,3-Trimethylbenzene	105	7.900	7.900	0.000	98	959549	50.0	53.0	
112 Benzyl chloride	91	7.981	7.982	-0.001	98	225983	50.0	38.5	
113 1,2-Dichlorobenzene	146	8.194	8.194	0.000	97	461895	50.0	49.2	
114 n-Butylbenzene	91	8.194	8.194	0.000	97	894168	50.0	56.8	
115 1,2-Dibromo-3-Chloropropan	157	8.956	8.951	0.005	93	28960	50.0	53.3	
116 1,3,5-Trichlorobenzene	180	9.152	9.152	0.000	98	361456	50.0	52.5	
117 1,2,4-Trichlorobenzene	180	9.778	9.778	0.000	94	279034	50.0	52.8	
118 Hexachlorobutadiene	225	9.979	9.980	-0.001	94	136461	50.0	48.4	
119 Naphthalene	128	10.055	10.056	-0.001	96	442832	50.0	50.5	
120 1,2,3-Trichlorobenzene	180	10.355	10.350	0.005	96	214231	50.0	51.6	
S 134 Xylenes, Total	1				0		100.0	105.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	93.3	
S 137 1,2-Dichloroethene, Total	1				0		100.0	90.5	
S 138 Trihalomethanes, Total	1				0		200.0	196.4	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

**Reagents:**

V1_gases_I_00107	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 10-Jun-2015 09:42:55

Chrom Revision: 2.2 14-May-2015 11:41:56

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-254379/4

Matrix: Water

Lab File ID: 060815-04.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 11:51

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	246		5.0	2.7
71-43-2	Benzene	47.5		0.50	0.20
75-25-2	Bromoform	49.8		0.50	0.29
74-83-9	Bromomethane	39.9		0.50	0.35
78-93-3	2-Butanone (MEK)	241		50	2.6
75-15-0	Carbon disulfide	46.6		0.50	0.22
56-23-5	Carbon tetrachloride	43.3		0.50	0.18
108-90-7	Chlorobenzene	48.8		0.50	0.18
124-48-1	Chlorodibromomethane	51.8		0.50	0.25
75-00-3	Chloroethane	54.3		0.50	0.36
67-66-3	Chloroform	46.7		0.50	0.23
74-87-3	Chloromethane	53.6		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	46.0		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	46.3		0.50	0.17
110-82-7	Cyclohexane	47.5		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	53.5		5.0	0.94
95-50-1	1,2-Dichlorobenzene	50.6		0.50	0.19
541-73-1	1,3-Dichlorobenzene	52.8		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.4		0.50	0.17
75-27-4	Dichlorobromomethane	45.8		0.50	0.17
75-71-8	Dichlorodifluoromethane	50.5		0.50	0.17
75-34-3	1,1-Dichloroethane	48.3		0.50	0.24
107-06-2	1,2-Dichloroethane	43.0		0.50	0.20
75-35-4	1,1-Dichloroethene	48.2		0.50	0.25
78-87-5	1,2-Dichloropropane	47.3		0.50	0.25
100-41-4	Ethylbenzene	52.7		0.50	0.19
106-93-4	1,2-Dibromoethane	50.1		0.50	0.21
591-78-6	2-Hexanone	278		5.0	1.3
98-82-8	Isopropylbenzene	53.1		1.0	0.33
79-20-9	Methyl acetate	237		10	0.58
108-87-2	Methylcyclohexane	45.7		0.50	0.090
75-09-2	Methylene Chloride	51.2		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	227		5.0	0.81
1634-04-4	Methyl tert-butyl ether	47.1		0.50	0.17
100-42-5	Styrene	54.0		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	52.6		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: LCSD 490-254379/4

Matrix: Water

Lab File ID: 060815-04.D

Analysis Method: 8260C

Date Collected: \_\_\_\_\_

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 11:51

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	39.9		0.50	0.14
108-88-3	Toluene	42.9		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	49.0		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	46.3		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	53.8		0.50	0.20
71-55-6	1,1,1-Trichloroethane	43.6		0.50	0.19
79-00-5	1,1,2-Trichloroethane	41.6		0.50	0.19
79-01-6	Trichloroethene	44.6		0.50	0.20
75-69-4	Trichlorofluoromethane	44.9		0.50	0.21
76-13-1	Freon-113	45.2		1.0	0.15
75-01-4	Vinyl chloride	56.1		0.50	0.18
1330-20-7	Xylenes, Total	107		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	119		70-130
1868-53-7	Dibromofluoromethane (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-04.D  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 08-Jun-2015 11:51:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: lcsd  
 Misc. Info.: 490-0056175-004  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:38:21 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:39:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	450113	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.714	0.001	84	351615	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	92	181695	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.025	0.001	94	101747	25.0	23.5	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.237	0.001	0	90938	25.0	23.8	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	413491	25.0	23.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.748	0.001	95	159742	25.0	29.7	
10 Dichlorodifluoromethane	85	1.060	1.065	-0.005	99	258410	50.0	50.5	
11 Chloromethane	50	1.169	1.174	-0.005	99	236065	50.0	53.6	
12 Vinyl chloride	62	1.213	1.212	0.001	98	284333	50.0	56.1	
13 Butadiene	54	1.229	1.229	0.000	87	261553	50.0	58.0	
14 Bromomethane	96	1.382	1.381	0.001	90	145992	50.0	39.9	
15 Chloroethane	64	1.425	1.430	-0.005	99	174742	50.0	54.3	
16 Dichlorofluoromethane	67	1.523	1.523	0.000	97	422884	50.0	52.2	
17 Trichlorofluoromethane	101	1.550	1.555	-0.005	98	381099	50.0	44.9	
18 Ethanol	45	1.654	1.653	0.001	97	18378	2000.0	2273.2	
19 Ethyl ether	59	1.692	1.691	0.001	87	145449	50.0	51.1	
20 Acrolein	56	1.763	1.768	-0.005	98	41353	125.0	125.1	
21 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.806	0.000	94	231649	50.0	45.2	
22 1,1-Dichloroethene	96	1.812	1.811	0.001	96	226964	50.0	48.2	
23 Acetone	58	1.844	1.844	0.000	100	41150	250.0	245.7	
24 Iodomethane	142	1.899	1.898	0.001	97	203454	50.0	30.3	
25 Isopropyl alcohol	45	1.910	1.909	0.001	100	43822	500.0	477.8	
26 Carbon disulfide	76	1.931	1.931	0.000	98	579197	50.0	46.6	
28 Acetonitrile	41	1.991	1.991	0.000	87	400011	500.0	503.0	
29 3-Chloro-1-propene	76	1.991	1.991	0.000	93	230164	NC	NC	
30 Methyl acetate	43	2.002	2.002	0.000	97	374041	250.0	237.3	
31 Methylene Chloride	84	2.057	2.056	0.001	86	234701	50.0	51.2	
32 2-Methyl-2-propanol	59	2.117	2.116	0.000	100	79290	500.0	488.8	
33 Acrylonitrile	53	2.187	2.187	0.000	99	381272	500.0	492.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.198	2.198	0.000	94	444788	50.0	47.1	
34 trans-1,2-Dichloroethene	61	2.193	2.198	-0.005	98	306349	50.0	49.0	
36 Hexane	57	2.334	2.334	0.000	88	331816	50.0	50.6	
37 1,1-Dichloroethane	63	2.421	2.421	0.000	96	407613	50.0	48.3	
39 Vinyl acetate	43	2.449	2.448	0.001	97	758208	100.0	96.3	
38 Isopropyl ether	45	2.449	2.454	-0.005	83	600595	50.0	48.8	
40 2-Chloro-1,3-butadiene	53	2.470	2.470	0.000	90	337550	50.0	48.0	
41 Tert-butyl ethyl ether	59	2.655	2.655	0.000	97	549200	50.0	48.5	
42 cis-1,2-Dichloroethene	61	2.748	2.747	0.001	80	344007	50.0	46.0	
43 2,2-Dichloropropane	77	2.748	2.747	0.001	74	346919	50.0	47.5	
44 2-Butanone (MEK)	72	2.764	2.764	0.000	98	63558	250.0	241.1	
45 Ethyl acetate	43	2.786	2.786	0.000	94	192753	100.0	96.8	
46 Propionitrile	54	2.802	2.802	0.000	99	137143	500.0	483.5	
47 Methacrylonitrile	41	2.884	2.884	0.000	90	574820	500.0	448.1	
48 Chlorobromomethane	130	2.889	2.889	0.000	84	136331	50.0	44.0	
50 Chloroform	83	2.928	2.927	0.001	91	399216	50.0	46.7	
49 Tetrahydrofuran	42	2.928	2.927	0.001	72	52922	100.0	88.6	
51 1,1,1-Trichloroethane	97	3.042	3.041	0.001	98	354489	50.0	43.6	
53 Cyclohexane	56	3.075	3.074	0.001	87	390615	50.0	47.5	
55 Carbon tetrachloride	117	3.145	3.145	0.000	91	311303	50.0	43.3	
54 1,1-Dichloropropene	75	3.140	3.145	-0.005	97	324282	50.0	46.9	
56 Isobutyl alcohol	43	3.222	3.221	0.001	95	80146	1250.0	1150.1	
57 Benzene	78	3.276	3.275	0.001	95	970413	50.0	47.5	
58 t-Amyl alcohol	59	3.281	3.281	0.000	80	62040	500.0	436.5	
59 1,2-Dichloroethane	62	3.287	3.286	0.001	98	230333	50.0	43.0	
60 Tert-amyl methyl ether	73	3.341	3.341	0.000	98	466937	50.0	46.4	
61 n-Heptane	43	3.423	3.422	0.001	94	279022	50.0	48.7	
62 n-Butanol	56	3.662	3.662	0.000	84	57302	1250.0	1221.0	
63 Trichloroethene	130	3.690	3.689	0.001	98	266443	50.0	44.6	
64 Ethyl acrylate	55	3.766	3.765	0.001	98	131874	50.0	50.6	
65 Methylcyclohexane	83	3.815	3.814	0.001	86	421702	50.0	45.7	
66 1,2-Dichloropropane	63	3.842	3.842	0.000	96	220185	50.0	47.3	
68 Dibromomethane	93	3.924	3.923	0.001	92	100161	50.0	43.4	
67 Methyl methacrylate	41	3.924	3.923	0.001	87	186849	100.0	92.4	
69 1,4-Dioxane	88	3.956	3.956	0.000	93	19918	1000.0	1117.1	
71 Dichlorobromomethane	83	4.027	4.027	0.000	99	280217	50.0	45.8	
72 2-Nitropropane	43	4.201	4.201	0.000	95	52632	100.0	88.3	
73 2-Chloroethyl vinyl ether	63	4.250	4.250	0.000	91	78982	50.0	42.9	
74 cis-1,3-Dichloropropene	75	4.354	4.353	0.001	97	331281	50.0	46.3	
75 4-Methyl-2-pentanone (MIBK)	58	4.479	4.478	0.001	93	192942	250.0	227.3	
76 Toluene	91	4.604	4.604	0.000	99	1024859	50.0	42.9	
77 trans-1,3-Dichloropropene	75	4.773	4.772	0.001	90	253373	50.0	46.3	
78 Ethyl methacrylate	69	4.855	4.854	0.001	87	183320	50.0	45.2	
79 1,1,2-Trichloroethane	97	4.920	4.919	0.001	89	145375	50.0	41.6	
80 Tetrachloroethene	166	5.029	5.028	0.001	97	267611	50.0	39.9	
81 1,3-Dichloropropane	76	5.051	5.050	0.001	87	269198	50.0	46.5	
82 2-Hexanone	58	5.132	5.132	0.000	93	190594	250.0	277.9	
83 Chlorodibromomethane	127	5.230	5.230	0.000	89	155025	50.0	51.8	
84 n-Butyl acetate	43	5.236	5.235	0.001	97	139290	50.0	54.5	
85 Ethylene Dibromide	107	5.328	5.328	0.000	99	156814	50.0	50.1	
86 1-Chlorohexane	91	5.720	5.720	0.000	92	376805	50.0	52.9	
87 Chlorobenzene	112	5.736	5.736	0.000	96	739337	50.0	48.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 1,1,1,2-Tetrachloroethane	131	5.802	5.807	-0.005	95	253799	50.0	50.1	
89 Ethylbenzene	91	5.829	5.828	0.001	97	1259950	50.0	52.7	
90 m-Xylene & p-Xylene	91	5.932	5.932	0.000	0	999148	50.0	53.4	
91 o-Xylene	91	6.281	6.280	0.001	96	1000025	50.0	53.8	
92 Styrene	104	6.297	6.297	0.000	95	797850	50.0	54.0	
93 Bromoform	173	6.455	6.454	0.001	98	102108	50.0	49.8	
94 Isopropylbenzene	105	6.613	6.612	0.001	95	1237223	50.0	53.1	
95 Cyclohexanone	55	6.705	6.705	0.000	89	74019	500.0	1055.7	E
96 Bromobenzene	77	6.880	6.879	0.001	91	385173	50.0	54.1	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.890	0.000	95	158643	50.0	52.6	
98 1,2,3-Trichloropropane	110	6.929	6.928	0.001	81	48930	50.0	51.7	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.950	0.000	81	37734	50.0	57.9	
100 N-Propylbenzene	91	6.988	6.988	0.000	98	1419893	50.0	57.8	
101 2-Chlorotoluene	91	7.059	7.059	0.000	97	828396	50.0	54.4	
102 1,3,5-Trimethylbenzene	105	7.157	7.157	0.000	95	1029329	50.0	57.1	
103 4-Chlorotoluene	91	7.163	7.162	0.001	99	973778	50.0	55.6	
104 tert-Butylbenzene	119	7.457	7.456	0.001	92	871855	50.0	55.9	
106 1,2,4-Trimethylbenzene	105	7.506	7.505	0.001	97	1039187	50.0	57.5	
107 sec-Butylbenzene	105	7.663	7.663	0.000	94	1281911	50.0	56.8	
108 1,3-Dichlorobenzene	146	7.756	7.755	0.001	98	549919	50.0	52.8	
109 4-Isopropyltoluene	119	7.805	7.804	0.001	96	1122859	50.0	56.0	
110 1,4-Dichlorobenzene	146	7.843	7.843	0.000	95	557246	50.0	49.4	
111 1,2,3-Trimethylbenzene	105	7.897	7.897	0.000	98	995639	50.0	54.5	
112 Benzyl chloride	91	7.979	7.984	-0.005	98	288707	50.0	47.2	
113 1,2-Dichlorobenzene	146	8.191	8.191	0.000	97	478727	50.0	50.6	
114 n-Butylbenzene	91	8.197	8.196	0.001	97	930089	50.0	58.6	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.953	0.000	92	29309	50.0	53.5	
116 1,3,5-Trichlorobenzene	180	9.149	9.149	0.000	98	370232	50.0	53.3	
117 1,2,4-Trichlorobenzene	180	9.781	9.780	0.001	94	286636	50.0	53.8	
118 Hexachlorobutadiene	225	9.977	9.976	0.001	97	141936	50.0	49.9	
119 Naphthalene	128	10.053	10.053	0.000	96	453269	50.0	51.2	
120 1,2,3-Trichlorobenzene	180	10.352	10.352	0.000	96	219097	50.0	52.3	
S 137 1,2-Dichloroethene, Total	1				0		100.0	94.9	
S 138 Trihalomethanes, Total	1				0		200.0	194.1	
S 134 Xylenes, Total	1				0		100.0	107.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.7	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

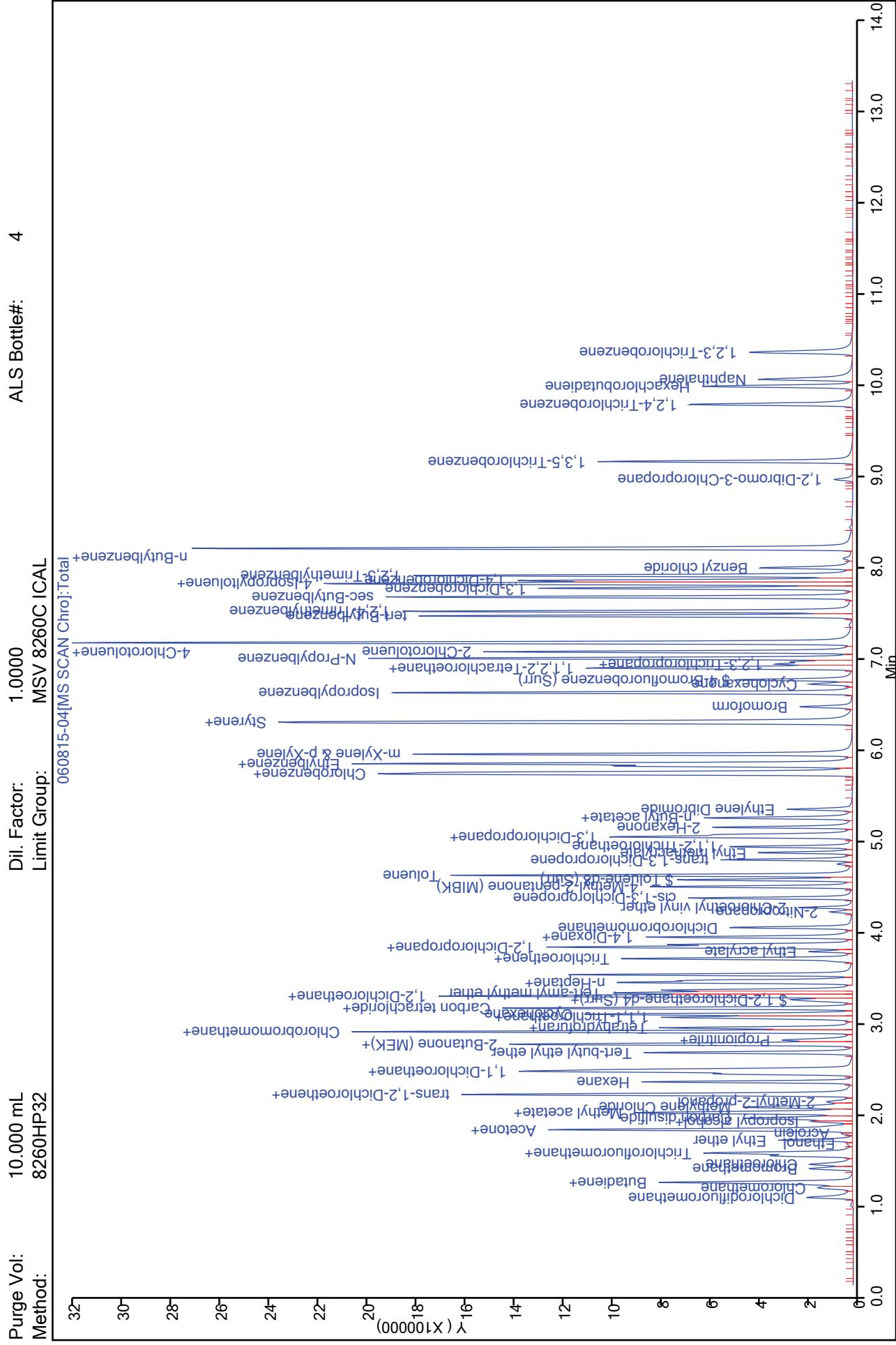
**Reagents:**

V1_gases_I_00108	Amount Added: 50.00	Units: uL	
V1_Mega_I_00037	Amount Added: 50.00	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:39:38

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\Nashville\ChromData\HP32\20150608-56175.b\060815-04.D  
Injection Date: 08-Jun-2015 11:51:30  
Lims ID: LCS3  
Instrument ID: HP32  
TestAmerica Nashville



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115 MS

Lab Sample ID: 490-79645-1 MS

Matrix: Ground Water

Lab File ID: 060815-05.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 12:18

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	228		5.0	2.7
71-43-2	Benzene	49.2		0.50	0.20
75-25-2	Bromoform	48.6		0.50	0.29
74-83-9	Bromomethane	42.0		0.50	0.35
78-93-3	2-Butanone (MEK)	225		50	2.6
75-15-0	Carbon disulfide	49.8		0.50	0.22
56-23-5	Carbon tetrachloride	46.8		0.50	0.18
108-90-7	Chlorobenzene	49.6		0.50	0.18
124-48-1	Chlorodibromomethane	50.9		0.50	0.25
75-00-3	Chloroethane	57.0		0.50	0.36
67-66-3	Chloroform	47.6		0.50	0.23
74-87-3	Chloromethane	53.9		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	48.2		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	46.6		0.50	0.17
110-82-7	Cyclohexane	53.7		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	49.2		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.0		0.50	0.19
541-73-1	1,3-Dichlorobenzene	53.1		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.1		0.50	0.17
75-27-4	Dichlorobromomethane	46.1		0.50	0.17
75-71-8	Dichlorodifluoromethane	55.1		0.50	0.17
75-34-3	1,1-Dichloroethane	50.0		0.50	0.24
107-06-2	1,2-Dichloroethane	43.0		0.50	0.20
75-35-4	1,1-Dichloroethene	51.7		0.50	0.25
78-87-5	1,2-Dichloropropane	47.8		0.50	0.25
100-41-4	Ethylbenzene	54.6		0.50	0.19
106-93-4	1,2-Dibromoethane	49.2		0.50	0.21
591-78-6	2-Hexanone	270		5.0	1.3
98-82-8	Isopropylbenzene	55.7		1.0	0.33
79-20-9	Methyl acetate	229		10	0.58
108-87-2	Methylcyclohexane	51.8		0.50	0.090
75-09-2	Methylene Chloride	52.5		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	217		5.0	0.81
1634-04-4	Methyl tert-butyl ether	46.1		0.50	0.17
100-42-5	Styrene	54.9		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	50.4		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115 MS

Lab Sample ID: 490-79645-1 MS

Matrix: Ground Water

Lab File ID: 060815-05.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 12:18

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	42.1		0.50	0.14
108-88-3	Toluene	44.4		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	51.3		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	46.0		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	54.2		0.50	0.20
71-55-6	1,1,1-Trichloroethane	46.1		0.50	0.19
79-00-5	1,1,2-Trichloroethane	40.7		0.50	0.19
79-01-6	Trichloroethene	46.5		0.50	0.20
75-69-4	Trichlorofluoromethane	49.6		0.50	0.21
76-13-1	Freon-113	50.6		1.0	0.15
75-01-4	Vinyl chloride	60.0		0.50	0.18
1330-20-7	Xylenes, Total	110		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	117		70-130
1868-53-7	Dibromofluoromethane (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-130

**TestAmerica Nashville**  
**Target Compound Quantitation Report**

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060815-05.D  
 Lims ID: 490-79645-B-1 MS  
 Client ID: OB-20A-060115  
 Sample Type: MS  
 Inject. Date: 08-Jun-2015 12:18:30 ALS Bottle#: 5 Worklist Smp#: 26  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-B-1 MS  
 Misc. Info.: 490-0056110-026  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:08:56 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:08:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.449	3.446	0.003	99	440429	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.711	0.003	84	345295	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.820	7.823	-0.003	92	181217	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.027	-0.002	94	100367	25.0	23.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.239	-0.002	0	88510	25.0	23.7	
\$ 6 Toluene-d8 (Surr)	98	4.554	4.551	0.003	92	412092	25.0	24.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.748	6.750	-0.002	96	157045	25.0	29.3	
10 Dichlorodifluoromethane	85	1.065	1.063	0.002	99	275899	50.0	55.1	
11 Chloromethane	50	1.174	1.177	-0.003	99	232145	50.0	53.9	
12 Vinyl chloride	62	1.212	1.216	-0.004	97	297412	50.0	60.0	
13 Butadiene	54	1.228	1.232	-0.004	87	282177	50.0	64.0	
14 Bromomethane	96	1.381	1.379	0.002	90	150600	50.0	42.0	
15 Chloroethane	64	1.430	1.428	0.002	99	179559	50.0	57.0	
16 Dichlorofluoromethane	67	1.522	1.526	-0.004	97	429598	50.0	54.2	
17 Trichlorofluoromethane	101	1.555	1.553	0.002	98	411906	50.0	49.6	
18 Ethanol	45	1.653	1.651	0.002	96	15993	2000.0	2019.5	
19 Ethyl ether	59	1.691	1.695	-0.004	87	139912	50.0	50.2	
20 Acrolein	56	1.767	1.771	-0.004	99	41665	125.0	128.8	
21 1,1,2-Trichloro-1,2,2-trif	101	1.805	1.803	0.002	94	253874	50.0	50.6	
22 1,1-Dichloroethene	96	1.811	1.814	-0.003	97	238306	50.0	51.7	
23 Acetone	58	1.844	1.842	0.002	99	37318	250.0	227.6	
24 Iodomethane	142	1.898	1.896	0.002	97	212526	50.0	32.4	
25 Isopropyl alcohol	45	1.909	1.912	-0.003	99	42490	500.0	473.4	
26 Carbon disulfide	76	1.936	1.934	0.002	98	604747	50.0	49.8	
28 Acetonitrile	41	1.991	1.994	-0.003	76	400162	500.0	514.3	
29 3-Chloro-1-propene	76	1.991	1.994	-0.003	93	242929	NC	NC	
30 Methyl acetate	43	2.001	2.005	-0.004	96	352881	250.0	228.8	
31 Methylene Chloride	84	2.056	2.059	-0.003	85	235280	50.0	52.5	
32 2-Methyl-2-propanol	59	2.116	2.114	0.002	100	72297	500.0	455.5	
33 Acrylonitrile	53	2.187	2.190	-0.004	99	356221	500.0	469.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.197	2.195	0.002	94	425564	50.0	46.1	
34 trans-1,2-Dichloroethene	61	2.197	2.195	0.002	89	314124	50.0	51.3	
36 Hexane	57	2.333	2.337	-0.004	88	375110	50.0	58.5	
37 1,1-Dichloroethane	63	2.421	2.424	-0.003	96	413321	50.0	50.0	
39 Vinyl acetate	43	2.448	2.446	0.002	97	725158	100.0	94.1	
38 Isopropyl ether	45	2.453	2.451	0.002	83	584703	50.0	48.6	
40 2-Chloro-1,3-butadiene	53	2.470	2.473	-0.003	89	355339	50.0	51.6	
41 Tert-butyl ethyl ether	59	2.655	2.658	-0.003	97	529959	50.0	47.8	
42 cis-1,2-Dichloroethene	61	2.747	2.745	0.002	80	352746	50.0	48.2	
43 2,2-Dichloropropane	77	2.747	2.745	0.002	76	370310	50.0	51.8	
44 2-Butanone (MEK)	72	2.764	2.762	0.002	97	57938	250.0	224.6	
45 Ethyl acetate	43	2.785	2.789	-0.004	98	189632	100.0	97.4	
46 Propionitrile	54	2.802	2.800	0.002	99	127594	500.0	459.7	
47 Methacrylonitrile	41	2.883	2.881	0.002	90	550869	500.0	438.8	
48 Chlorobromomethane	130	2.889	2.887	0.002	76	133469	50.0	44.0	
50 Chloroform	83	2.927	2.930	-0.003	92	397869	50.0	47.6	
49 Tetrahydrofuran	42	2.927	2.930	-0.003	71	47688	100.0	81.6	
51 1,1,1-Trichloroethane	97	3.047	3.045	0.002	98	366960	50.0	46.1	
53 Cyclohexane	56	3.074	3.077	-0.003	87	432201	50.0	53.7	
54 1,1-Dichloropropene	75	3.145	3.143	0.002	97	343016	50.0	50.7	
55 Carbon tetrachloride	117	3.145	3.148	-0.003	91	329280	50.0	46.8	
56 Isobutyl alcohol	43	3.221	3.219	0.002	94	73434	1250.0	1077.0	
57 Benzene	78	3.275	3.273	0.002	95	984015	50.0	49.2	
58 t-Amyl alcohol	59	3.281	3.284	-0.003	61	54211	500.0	389.8	
59 1,2-Dichloroethane	62	3.286	3.284	0.002	97	225328	50.0	43.0	
60 Tert-amyl methyl ether	73	3.341	3.344	-0.003	97	451568	50.0	45.8	
61 n-Heptane	43	3.428	3.426	0.002	88	316587	50.0	56.5	
62 n-Butanol	56	3.662	3.660	0.002	84	51108	1250.0	1113.0	
63 Trichloroethene	130	3.689	3.687	0.002	98	271943	50.0	46.5	
64 Ethyl acrylate	55	3.765	3.763	0.002	99	122933	50.0	48.2	
65 Methylcyclohexane	83	3.814	3.818	-0.004	83	467263	50.0	51.8	
66 1,2-Dichloropropane	63	3.841	3.845	-0.004	96	217606	50.0	47.8	
67 Methyl methacrylate	41	3.923	3.921	0.002	88	176364	100.0	89.1	
68 Dibromomethane	93	3.928	3.926	0.002	92	96200	50.0	42.6	
69 1,4-Dioxane	88	3.956	3.954	0.002	94	15965	1000.0	915.1	
71 Dichlorobromomethane	83	4.032	4.030	0.002	99	275755	50.0	46.1	
72 2-Nitropropane	43	4.201	4.204	-0.003	96	51452	100.0	88.2	
74 cis-1,3-Dichloropropene	75	4.353	4.356	-0.003	97	327065	50.0	46.6	
75 4-Methyl-2-pentanone (MIBK)	58	4.478	4.476	0.002	94	180850	250.0	217.0	
76 Toluene	91	4.603	4.601	0.002	99	1042167	50.0	44.4	
77 trans-1,3-Dichloropropene	75	4.772	4.776	-0.004	90	246794	50.0	46.0	
78 Ethyl methacrylate	69	4.854	4.852	0.002	87	177409	50.0	44.6	
79 1,1,2-Trichloroethane	97	4.919	4.917	0.002	90	139575	50.0	40.7	
80 Tetrachloroethene	166	5.028	5.026	0.002	97	277855	50.0	42.1	
81 1,3-Dichloropropane	76	5.050	5.053	-0.003	87	259445	50.0	45.7	
82 2-Hexanone	58	5.131	5.129	0.002	92	181713	250.0	269.8	
83 Chlorodibromomethane	127	5.235	5.233	0.002	89	149525	50.0	50.9	
84 n-Butyl acetate	43	5.240	5.238	0.002	97	137188	50.0	54.8	
85 Ethylene Dibromide	107	5.327	5.331	-0.004	99	151447	50.0	49.2	
86 1-Chlorohexane	91	5.719	5.717	0.002	92	405048	50.0	58.2	
87 Chlorobenzene	112	5.736	5.739	-0.003	96	737839	50.0	49.6	
88 1,1,1,2-Tetrachloroethane	131	5.806	5.804	0.002	96	251013	50.0	50.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.828	5.832	-0.004	97	1280819	50.0	54.6	
90 m-Xylene & p-Xylene	91	5.932	5.935	-0.003	0	1007220	50.0	54.8	
91 o-Xylene	91	6.280	6.278	0.002	96	1008362	50.0	55.3	
92 Styrene	104	6.296	6.294	0.002	95	795869	50.0	54.9	
93 Bromoform	173	6.454	6.458	-0.004	98	97854	50.0	48.6	
94 Isopropylbenzene	105	6.612	6.610	0.002	95	1273493	50.0	55.7	
95 Cyclohexanone	55	6.710	6.708	0.002	89	24006	500.0	350.4	
96 Bromobenzene	77	6.879	6.877	0.002	89	379900	50.0	53.5	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.893	-0.003	93	151677	50.0	50.4	
98 1,2,3-Trichloropropane	110	6.928	6.928	0.002	26	45809	50.0	48.5	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.948	0.002	94	36216	50.0	55.7	
100 N-Propylbenzene	91	6.988	6.986	0.002	98	1466597	50.0	59.8	
101 2-Chlorotoluene	91	7.058	7.062	-0.004	97	844941	50.0	55.6	
102 1,3,5-Trimethylbenzene	105	7.156	7.160	-0.004	94	1053416	50.0	58.6	
103 4-Chlorotoluene	91	7.162	7.160	0.002	98	983789	50.0	56.3	
104 tert-Butylbenzene	119	7.456	7.454	0.002	92	903632	50.0	58.1	
106 1,2,4-Trimethylbenzene	105	7.505	7.503	0.002	96	1055620	50.0	58.6	
107 sec-Butylbenzene	105	7.663	7.661	0.002	93	1348610	50.0	59.9	
108 1,3-Dichlorobenzene	146	7.761	7.759	0.002	98	551710	50.0	53.1	
109 4-Isopropyltoluene	119	7.804	7.808	-0.004	96	1159461	50.0	58.0	
110 1,4-Dichlorobenzene	146	7.842	7.846	-0.004	95	552665	50.0	49.1	
111 1,2,3-Trimethylbenzene	105	7.897	7.900	-0.003	98	1000826	50.0	54.9	
112 Benzyl chloride	91	7.984	7.982	0.002	98	292838	50.0	48.8	
113 1,2-Dichlorobenzene	146	8.191	8.194	-0.003	97	481502	50.0	51.0	
114 n-Butylbenzene	91	8.196	8.194	0.002	97	996324	50.0	62.9	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.951	0.002	92	26919	50.0	49.2	
116 1,3,5-Trichlorobenzene	180	9.149	9.152	-0.003	98	377935	50.0	54.6	
117 1,2,4-Trichlorobenzene	180	9.780	9.778	0.002	94	287854	50.0	54.2	
118 Hexachlorobutadiene	225	9.982	9.980	0.002	97	152526	50.0	53.8	
119 Naphthalene	128	10.058	10.056	0.002	96	441441	50.0	50.0	
120 1,2,3-Trichlorobenzene	180	10.352	10.350	0.002	96	219367	50.0	52.5	
S 137 1,2-Dichloroethene, Total	1				0		100.0	99.5	
S 138 Trihalomethanes, Total	1				0		200.0	193.1	
S 134 Xylenes, Total	1				0		100.0	110.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.6	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

V1_gases_I_00107	Amount Added: 21.50	Units: uL	
V1_Mega_I_00037	Amount Added: 21.50	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SC-01-060215 MS

Lab Sample ID: 490-79781-1 MS

Matrix: Ground Water

Lab File ID: 060515-26.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 22:38

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	213		5.0	2.7
71-43-2	Benzene	47.9		0.50	0.20
75-25-2	Bromoform	49.2		0.50	0.29
74-83-9	Bromomethane	28.2		0.50	0.35
78-93-3	2-Butanone (MEK)	220		50	2.6
75-15-0	Carbon disulfide	44.3		0.50	0.22
56-23-5	Carbon tetrachloride	46.4		0.50	0.18
108-90-7	Chlorobenzene	48.5		0.50	0.18
124-48-1	Chlorodibromomethane	51.1		0.50	0.25
75-00-3	Chloroethane	49.9		0.50	0.36
67-66-3	Chloroform	46.5		0.50	0.23
74-87-3	Chloromethane	41.7		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	45.2		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	47.7		0.50	0.17
110-82-7	Cyclohexane	48.3		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	50.6		5.0	0.94
95-50-1	1,2-Dichlorobenzene	50.1		0.50	0.19
541-73-1	1,3-Dichlorobenzene	50.8		0.50	0.18
106-46-7	1,4-Dichlorobenzene	47.9		0.50	0.17
75-27-4	Dichlorobromomethane	44.7		0.50	0.17
75-71-8	Dichlorodifluoromethane	40.6		0.50	0.17
75-34-3	1,1-Dichloroethane	46.3		0.50	0.24
107-06-2	1,2-Dichloroethane	42.3		0.50	0.20
75-35-4	1,1-Dichloroethene	46.7		0.50	0.25
78-87-5	1,2-Dichloropropane	45.2		0.50	0.25
100-41-4	Ethylbenzene	53.0		0.50	0.19
106-93-4	1,2-Dibromoethane	48.5		0.50	0.21
591-78-6	2-Hexanone	252		5.0	1.3
98-82-8	Isopropylbenzene	55.4		1.0	0.33
79-20-9	Methyl acetate	217		10	0.58
108-87-2	Methylcyclohexane	46.0		0.50	0.090
75-09-2	Methylene Chloride	47.6		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	236		5.0	0.81
1634-04-4	Methyl tert-butyl ether	44.4		0.50	0.17
100-42-5	Styrene	53.6		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	47.9		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville Job No.: 490-79645-1  
SDG No.:  
Client Sample ID: SC-01-060215 MS Lab Sample ID: 490-79781-1 MS  
Matrix: Ground Water Lab File ID: 060515-26.D  
Analysis Method: 8260C Date Collected: 06/02/2015 09:45  
Sample wt/vol: 10 (mL) Date Analyzed: 06/05/2015 22:38  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: DB-624 ID: 0.18 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 253850 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	44.4		0.50	0.14
108-88-3	Toluene	46.6		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	46.8		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	47.5		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	50.9		0.50	0.20
71-55-6	1,1,1-Trichloroethane	45.2		0.50	0.19
79-00-5	1,1,2-Trichloroethane	44.1		0.50	0.19
79-01-6	Trichloroethene	45.9		0.50	0.20
75-69-4	Trichlorofluoromethane	44.1		0.50	0.21
76-13-1	Freon-113	43.1		1.0	0.15
75-01-4	Vinyl chloride	49.2		0.50	0.18
1330-20-7	Xylenes, Total	154		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	110		70-130
1868-53-7	Dibromofluoromethane (Surr)	96		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\060515-26.D  
 Lims ID: 490-79781-B-1 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 05-Jun-2015 22:38:30 ALS Bottle#: 26 Worklist Smp#: 26  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-B-1 MS  
 Misc. Info.: 490-0056059-026  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\Nashville\ChromData\HP32\20150605-56059.b\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:24:53 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Nashville\ChromData\HP32\20150518-55131.b\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 14:26:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.448	3.447	0.001	99	439198	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.711	0.001	84	315684	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.819	7.823	-0.004	93	173304	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.029	3.028	0.001	94	101499	25.0	24.0	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.241	3.240	0.001	0	88016	25.0	23.6	
\$ 6 Toluene-d8 (Surr)	98	4.553	4.552	0.001	92	396384	25.0	25.3	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.752	6.751	0.001	95	140469	25.0	27.4	
10 Dichlorodifluoromethane	85	1.064	1.063	0.001	99	202335	50.0	40.6	
11 Chloromethane	50	1.173	1.177	-0.004	99	179321	50.0	41.7	
12 Vinyl chloride	62	1.216	1.215	0.001	98	243100	50.0	49.2	
13 Butadiene	54	1.232	1.231	0.001	87	222345	50.0	50.5	
14 Bromomethane	96	1.379	1.378	0.001	90	100701	50.0	28.2	
15 Chloroethane	64	1.428	1.427	0.001	99	156857	50.0	49.9	
16 Dichlorofluoromethane	67	1.526	1.520	0.006	97	381000	50.0	48.2	
17 Trichlorofluoromethane	101	1.554	1.552	0.002	98	364663	50.0	44.1	
18 Ethanol	45	1.657	1.661	-0.004	97	13296	2000.0	1680.3	
19 Ethyl ether	59	1.695	1.694	0.001	87	127307	50.0	45.8	
20 Acrolein	56	1.766	1.765	0.001	98	37437	125.0	116.0	
21 1,1,2-Trichloro-1,2,2-trif	101	1.804	1.803	0.001	95	215440	50.0	43.1	
22 1,1-Dichloroethene	96	1.809	1.808	0.001	96	214716	50.0	46.7	
23 Acetone	58	1.842	1.846	-0.004	99	34819	250.0	212.9	
24 Iodomethane	142	1.897	1.895	0.002	97	228829	50.0	35.0	
25 Isopropyl alcohol	45	1.913	1.912	0.001	99	35564	500.0	396.9	
26 Carbon disulfide	76	1.935	1.934	0.001	99	537085	50.0	44.3	
28 Acetonitrile	41	1.989	1.988	0.001	75	353416	500.0	455.5	
29 3-Chloro-1-propene	76	1.989	1.993	-0.004	92	206148	NC	NC	
30 Methyl acetate	43	2.000	2.004	-0.004	96	333216	250.0	216.6	
31 Methylene Chloride	84	2.054	2.053	0.001	86	212715	50.0	47.6	
32 2-Methyl-2-propanol	59	2.114	2.119	-0.005	99	63579	500.0	401.7	
33 Acrylonitrile	53	2.185	2.189	-0.004	99	336296	500.0	444.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.196	2.195	0.001	94	408949	50.0	44.4	
34 trans-1,2-Dichloroethene	61	2.196	2.195	0.001	87	285782	50.0	46.8	
36 Hexane	57	2.332	2.336	-0.004	89	297224	50.0	46.5	
37 1,1-Dichloroethane	63	2.419	2.423	-0.004	96	381459	50.0	46.3	
39 Vinyl acetate	43	2.446	2.445	0.001	97	708361	100.0	92.2	
38 Isopropyl ether	45	2.452	2.451	0.001	82	562428	50.0	46.9	
40 2-Chloro-1,3-butadiene	53	2.474	2.472	0.002	89	331346	50.0	48.2	
41 Tert-butyl ethyl ether	59	2.653	2.658	-0.005	97	516779	50.0	46.8	
42 cis-1,2-Dichloroethene	61	2.746	2.745	0.001	80	330226	50.0	45.2	
43 2,2-Dichloropropane	77	2.746	2.745	0.001	74	328499	50.0	46.1	
44 2-Butanone (MEK)	72	2.762	2.766	-0.004	98	56637	250.0	220.2	
45 Ethyl acetate	43	2.789	2.788	0.001	92	167195	100.0	86.1	
46 Propionitrile	54	2.800	2.799	0.001	100	120888	500.0	436.8	
47 Methacrylonitrile	41	2.882	2.886	-0.004	91	546144	500.0	436.3	
48 Chlorobromomethane	130	2.887	2.886	0.001	85	133185	50.0	44.0	
50 Chloroform	83	2.925	2.924	0.001	91	387546	50.0	46.5	
49 Tetrahydrofuran	42	2.931	2.930	0.001	76	48311	100.0	82.9	
51 1,1,1-Trichloroethane	97	3.045	3.044	0.001	97	358940	50.0	45.2	
53 Cyclohexane	56	3.078	3.077	0.001	87	387316	50.0	48.3	
54 1,1-Dichloropropene	75	3.143	3.142	0.001	96	323491	50.0	47.9	
55 Carbon tetrachloride	117	3.143	3.142	0.001	94	325309	50.0	46.4	
56 Isobutyl alcohol	43	3.219	3.224	-0.005	95	68021	1250.0	1000.4	
57 Benzene	78	3.274	3.273	0.001	95	955441	50.0	47.9	
58 t-Amyl alcohol	59	3.279	3.283	-0.004	71	52080	500.0	375.6	
59 1,2-Dichloroethane	62	3.285	3.283	0.002	98	221065	50.0	42.3	
60 Tert-amyl methyl ether	73	3.339	3.343	-0.004	97	430678	50.0	43.8	
61 n-Heptane	43	3.426	3.425	0.001	88	263908	50.0	47.2	
62 n-Butanol	56	3.666	3.665	0.001	85	44716	1250.0	976.5	
63 Trichloroethene	130	3.687	3.686	0.001	97	267791	50.0	45.9	
64 Ethyl acrylate	55	3.764	3.763	0.001	99	120835	50.0	47.5	
65 Methylcyclohexane	83	3.813	3.812	0.001	85	414175	50.0	46.0	
66 1,2-Dichloropropane	63	3.840	3.844	-0.004	96	205392	50.0	45.2	
67 Methyl methacrylate	41	3.922	3.920	0.002	88	177506	100.0	90.0	
68 Dibromomethane	93	3.927	3.926	0.001	91	97942	50.0	43.5	
69 1,4-Dioxane	88	3.960	3.958	0.002	88	13114	1000.0	753.8	
71 Dichlorobromomethane	83	4.030	4.029	0.001	99	266574	50.0	44.7	
72 2-Nitropropane	43	4.199	4.198	0.001	97	52527	100.0	90.3	
74 cis-1,3-Dichloropropene	75	4.352	4.356	-0.004	97	306371	50.0	47.7	
75 4-Methyl-2-pentanone (MIBK)	58	4.477	4.481	-0.004	94	179864	250.0	236.0	
76 Toluene	91	4.602	4.606	-0.004	98	999158	50.0	46.6	
77 trans-1,3-Dichloropropene	75	4.776	4.775	0.001	91	233179	50.0	47.5	
78 Ethyl methacrylate	69	4.852	4.851	0.001	87	172315	50.0	47.4	
79 1,1,2-Trichloroethane	97	4.918	4.917	0.001	90	138506	50.0	44.1	
80 Tetrachloroethene	166	5.027	5.025	0.002	98	267396	50.0	44.4	
81 1,3-Dichloropropane	76	5.054	5.053	0.001	87	242622	50.0	46.7	
82 2-Hexanone	58	5.130	5.134	-0.004	94	155377	250.0	252.3	
83 Chlorodibromomethane	127	5.233	5.232	0.001	90	137441	50.0	51.1	
84 n-Butyl acetate	43	5.239	5.238	0.001	98	123193	50.0	49.4	
85 Ethylene Dibromide	107	5.326	5.330	-0.004	100	136275	50.0	48.5	
86 1-Chlorohexane	91	5.718	5.717	0.001	92	340507	50.0	49.0	
87 Chlorobenzene	112	5.734	5.739	-0.004	97	658623	50.0	48.5	
88 1,1,1,2-Tetrachloroethane	131	5.805	5.804	0.001	95	229116	50.0	50.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.832	5.831	0.001	98	1136945	50.0	53.0	
90 m-Xylene & p-Xylene	91	5.930	5.934	-0.004	0	1631485	50.0	97.2	
91 o-Xylene	91	6.279	6.277	0.002	96	944939	50.0	56.6	
92 Styrene	104	6.295	6.294	0.001	94	711010	50.0	53.6	
93 Bromoform	173	6.453	6.457	-0.004	98	90496	50.0	49.2	
94 Isopropylbenzene	105	6.611	6.609	0.002	95	1158876	50.0	55.4	
95 Cyclohexanone	55	6.709	6.707	0.002	90	18403	500.0	269.5	
96 Bromobenzene	77	6.877	6.876	0.001	89	334812	50.0	49.3	
97 1,1,2,2-Tetrachloroethane	83	6.888	6.893	-0.005	94	137755	50.0	47.9	
98 1,2,3-Trichloropropane	110	6.926	6.925	0.001	81	43851	50.0	48.6	
99 trans-1,4-Dichloro-2-butene	53	6.948	6.952	-0.004	81	32405	50.0	52.1	
100 N-Propylbenzene	91	6.986	6.991	-0.004	98	1299369	50.0	55.4	
101 2-Chlorotoluene	91	7.062	7.061	0.001	98	751308	50.0	51.7	
102 1,3,5-Trimethylbenzene	105	7.155	7.159	-0.004	96	974802	50.0	56.7	
103 4-Chlorotoluene	91	7.160	7.165	-0.005	98	875591	50.0	52.4	
104 tert-Butylbenzene	119	7.454	7.453	0.001	92	822795	50.0	55.3	
106 1,2,4-Trimethylbenzene	105	7.503	7.502	0.001	97	1046681	50.0	60.7	
107 sec-Butylbenzene	105	7.661	7.660	0.001	94	1218042	50.0	56.6	
108 1,3-Dichlorobenzene	146	7.759	7.758	0.001	98	504895	50.0	50.8	
109 4-Isopropyltoluene	119	7.808	7.807	0.001	96	1066356	50.0	55.8	
110 1,4-Dichlorobenzene	146	7.841	7.845	-0.004	95	515634	50.0	47.9	
111 1,2,3-Trimethylbenzene	105	7.895	7.900	-0.005	98	976037	50.0	56.0	
112 Benzyl chloride	91	7.982	7.981	0.001	98	233081	50.0	42.5	
113 1,2-Dichlorobenzene	146	8.195	8.194	0.001	97	452656	50.0	50.1	
114 n-Butylbenzene	91	8.195	8.199	-0.004	97	894450	50.0	59.0	
115 1,2-Dibromo-3-Chloropropan	157	8.951	8.950	0.001	93	26466	50.0	50.6	
116 1,3,5-Trichlorobenzene	180	9.153	9.152	0.001	98	344883	50.0	52.1	
117 1,2,4-Trichlorobenzene	180	9.779	9.778	0.001	94	258772	50.0	50.9	
118 Hexachlorobutadiene	225	9.980	9.979	0.001	97	131787	50.0	48.6	
119 Naphthalene	128	10.056	10.055	0.001	96	459007	50.0	54.4	
120 1,2,3-Trichlorobenzene	180	10.350	10.349	0.001	95	188757	50.0	47.3	
S 137 1,2-Dichloroethene, Total	1				0		100.0	92.0	
S 138 Trihalomethanes, Total	1				0		200.0	191.5	
S 134 Xylenes, Total	1				0		100.0	153.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	95.2	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

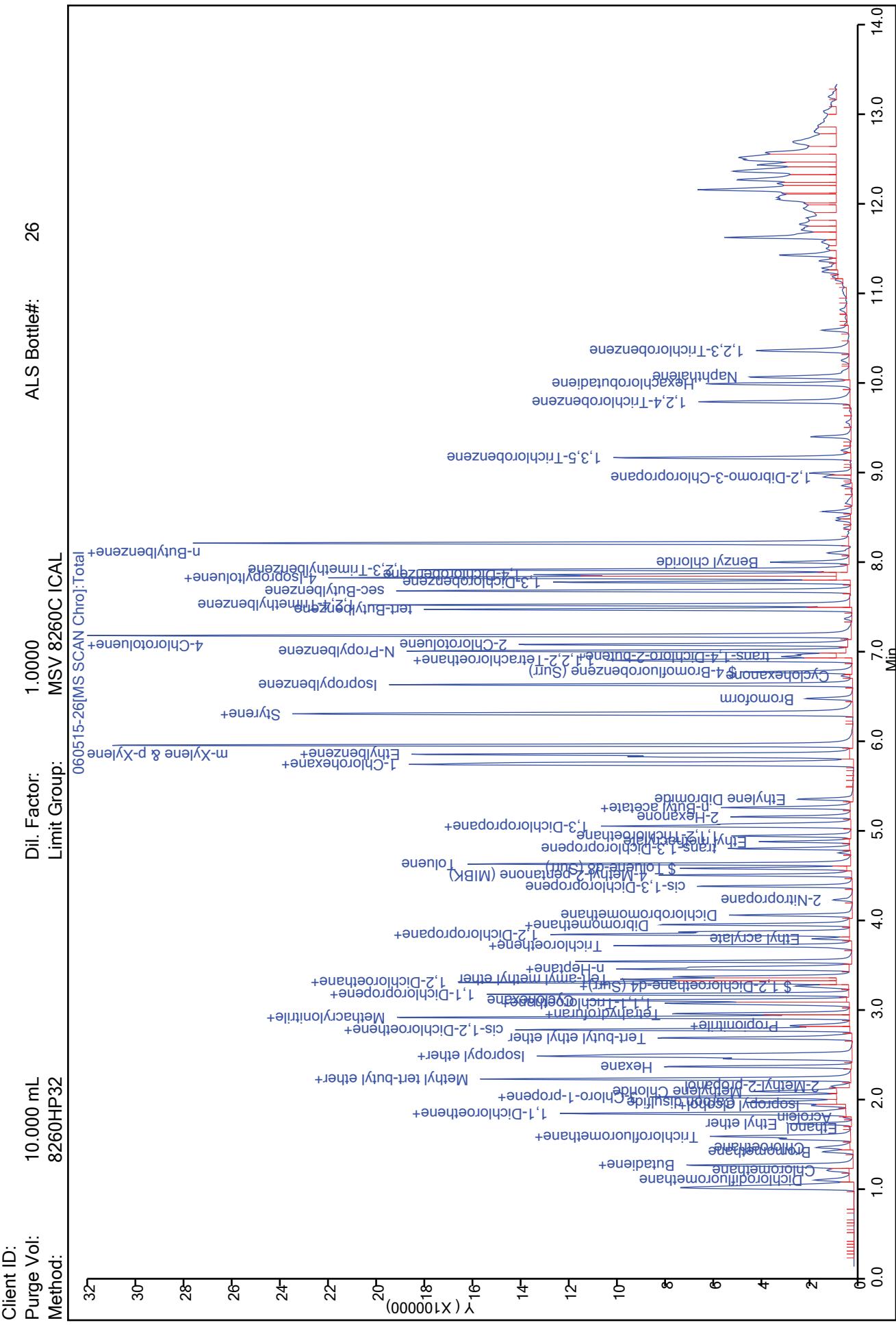
**Reagents:**

V1_gases_I_00107	Amount Added: 21.50	Units: uL	
V1_Mega_I_00037	Amount Added: 21.50	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 08-Jun-2015 14:26:37

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \ChromNA\Nashville\ChromData\HP32120150605-56059.b\06  
Injection Date: 05-Jun-2015 22:38:30  
Lims ID: 490-79781-B-1 MS  
Instrument ID: HP3  
TestAmerica Nashville



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: 490-79558-B-2 MS

Matrix: Water

Lab File ID: 060815-26.D

Analysis Method: 8260C

Date Collected: 05/28/2015 09:35

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 21:54

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	247		5.0	2.7
71-43-2	Benzene	50.8		0.50	0.20
75-25-2	Bromoform	49.6		0.50	0.29
74-83-9	Bromomethane	26.1		0.50	0.35
78-93-3	2-Butanone (MEK)	237		50	2.6
75-15-0	Carbon disulfide	49.7		0.50	0.22
56-23-5	Carbon tetrachloride	46.9		0.50	0.18
108-90-7	Chlorobenzene	51.5		0.50	0.18
124-48-1	Chlorodibromomethane	52.5		0.50	0.25
75-00-3	Chloroethane	58.1		0.50	0.36
67-66-3	Chloroform	49.2		0.50	0.23
74-87-3	Chloromethane	53.3		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	48.4		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	48.1		0.50	0.17
110-82-7	Cyclohexane	55.9		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	53.3		5.0	0.94
95-50-1	1,2-Dichlorobenzene	52.3		0.50	0.19
541-73-1	1,3-Dichlorobenzene	54.2		0.50	0.18
106-46-7	1,4-Dichlorobenzene	50.1		0.50	0.17
75-27-4	Dichlorobromomethane	47.4		0.50	0.17
75-71-8	Dichlorodifluoromethane	52.1		0.50	0.17
75-34-3	1,1-Dichloroethane	50.7		0.50	0.24
107-06-2	1,2-Dichloroethane	44.2		0.50	0.20
75-35-4	1,1-Dichloroethene	52.8		0.50	0.25
78-87-5	1,2-Dichloropropane	48.4		0.50	0.25
100-41-4	Ethylbenzene	60.4		0.50	0.19
106-93-4	1,2-Dibromoethane	51.0		0.50	0.21
591-78-6	2-Hexanone	287		5.0	1.3
98-82-8	Isopropylbenzene	59.1		1.0	0.33
79-20-9	Methyl acetate	232		10	0.58
108-87-2	Methylcyclohexane	53.9		0.50	0.090
75-09-2	Methylene Chloride	54.1		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	231		5.0	0.81
1634-04-4	Methyl tert-butyl ether	47.6		0.50	0.17
100-42-5	Styrene	56.9		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	53.1		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: 490-79558-B-2 MS

Matrix: Water

Lab File ID: 060815-26.D

Analysis Method: 8260C

Date Collected: 05/28/2015 09:35

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 21:54

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	43.7		0.50	0.14
108-88-3	Toluene	46.1		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	51.3		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	47.3		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	54.3		0.50	0.20
71-55-6	1,1,1-Trichloroethane	46.7		0.50	0.19
79-00-5	1,1,2-Trichloroethane	43.0		0.50	0.19
79-01-6	Trichloroethene	48.2		0.50	0.20
75-69-4	Trichlorofluoromethane	49.5		0.50	0.21
76-13-1	Freon-113	50.6		1.0	0.15
75-01-4	Vinyl chloride	59.8		0.50	0.18
1330-20-7	Xylenes, Total	117		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	118		70-130
1868-53-7	Dibromofluoromethane (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-26.D  
 Lims ID: 490-79558-B-2 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 08-Jun-2015 21:54:30 ALS Bottle#: 26 Worklist Smp#: 24  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79558-B-2 MS  
 Misc. Info.: 490-0056175-024  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:48:55 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:50:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.450	0.000	99	428188	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.714	0.000	84	333802	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.821	0.000	93	174970	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.025	0.000	94	97726	25.0	23.7	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.237	0.000	0	84184	25.0	23.2	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.555	0.000	92	399376	25.0	24.1	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.748	0.001	95	152675	25.0	29.5	
10 Dichlorodifluoromethane	85	1.066	1.065	0.001	99	253381	50.0	52.1	
11 Chloromethane	50	1.169	1.174	-0.005	99	223108	50.0	53.3	
12 Vinyl chloride	62	1.213	1.212	0.001	98	288170	50.0	59.8	
13 Butadiene	54	1.229	1.229	0.000	87	275141	50.0	64.1	
14 Bromomethane	96	1.381	1.381	0.000	90	91009	50.0	26.1	
15 Chloroethane	64	1.430	1.430	0.000	99	177869	50.0	58.1	
16 Dichlorofluoromethane	67	1.523	1.523	0.000	95	422957	50.0	54.8	
17 Trichlorofluoromethane	101	1.555	1.555	0.000	98	399643	50.0	49.5	
18 Ethanol	45	1.653	1.653	0.000	98	19279	2000.0	2508.8	
19 Ethyl ether	59	1.697	1.691	0.006	87	139409	50.0	51.4	
20 Acrolein	56	1.768	1.768	0.000	99	41836	125.0	133.0	
21 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.806	0.000	94	246959	50.0	50.6	
22 1,1-Dichloroethene	96	1.811	1.811	0.000	96	236634	50.0	52.8	
23 Acetone	58	1.844	1.844	0.000	99	39353	250.0	247.0	
24 Iodomethane	142	1.898	1.898	0.000	97	254860	50.0	39.9	
25 Isopropyl alcohol	45	1.909	1.909	0.000	99	40610	500.0	465.4	
26 Carbon disulfide	76	1.937	1.931	0.005	99	586514	50.0	49.7	
28 Acetonitrile	41	1.991	1.991	0.000	76	380974	500.0	503.6	
29 3-Chloro-1-propene	76	1.991	1.991	0.000	93	244422	NC	NC	
30 Methyl acetate	43	2.002	2.002	0.000	97	347888	250.0	232.0	
31 Methylene Chloride	84	2.056	2.056	0.000	85	235503	50.0	54.1	
32 2-Methyl-2-propanol	59	2.116	2.116	0.000	98	75893	500.0	491.8	
33 Acrylonitrile	53	2.187	2.187	0.000	100	360801	500.0	489.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.198	2.198	0.000	97	427724	50.0	47.6	
34 trans-1,2-Dichloroethene	61	2.198	2.198	0.000	94	305176	50.0	51.3	
36 Hexane	57	2.334	2.334	0.000	88	358580	50.0	57.5	
37 1,1-Dichloroethane	63	2.421	2.421	0.000	96	406819	50.0	50.7	
39 Vinyl acetate	43	2.448	2.448	0.000	98	699422	100.0	93.4	
38 Isopropyl ether	45	2.454	2.454	0.000	83	580589	50.0	49.6	
40 2-Chloro-1,3-butadiene	53	2.470	2.470	0.000	89	343299	50.0	51.3	
41 Tert-butyl ethyl ether	59	2.655	2.655	0.000	97	530617	50.0	49.2	
42 cis-1,2-Dichloroethene	61	2.748	2.747	0.001	79	344575	50.0	48.4	
43 2,2-Dichloropropane	77	2.748	2.747	0.001	74	342397	50.0	49.2	
44 2-Butanone (MEK)	72	2.764	2.764	0.000	97	59456	250.0	237.1	
45 Ethyl acetate	43	2.786	2.786	0.000	98	180636	100.0	95.4	
46 Propionitrile	54	2.802	2.802	0.000	99	129992	500.0	481.8	
47 Methacrylonitrile	41	2.884	2.884	0.000	89	549657	500.0	450.4	
48 Chlorobromomethane	130	2.889	2.889	0.000	77	134856	50.0	45.7	
50 Chloroform	83	2.927	2.927	0.000	91	399743	50.0	49.2	
49 Tetrahydrofuran	42	2.927	2.927	0.000	62	50495	100.0	88.9	
51 1,1,1-Trichloroethane	97	3.047	3.041	0.006	97	361261	50.0	46.7	
53 Cyclohexane	56	3.074	3.074	0.000	86	437762	50.0	55.9	
55 Carbon tetrachloride	117	3.145	3.145	0.000	91	320984	50.0	46.9	
54 1,1-Dichloropropene	75	3.145	3.145	0.000	97	335113	50.0	50.9	
56 Isobutyl alcohol	43	3.221	3.221	0.000	95	74815	1250.0	1128.6	
57 Benzene	78	3.276	3.275	0.001	95	988407	50.0	50.8	
58 t-Amyl alcohol	59	3.281	3.281	0.000	68	58052	500.0	429.4	
59 1,2-Dichloroethane	62	3.286	3.286	0.000	97	225468	50.0	44.2	
60 Tert-amyl methyl ether	73	3.341	3.341	0.000	97	456248	50.0	47.6	
61 n-Heptane	43	3.423	3.422	0.001	91	285064	50.0	52.3	
62 n-Butanol	56	3.662	3.662	0.000	86	54524	1250.0	1221.3	
63 Trichloroethene	130	3.689	3.689	0.000	97	273873	50.0	48.2	
64 Ethyl acrylate	55	3.766	3.765	0.001	98	124671	50.0	50.2	
65 Methylcyclohexane	83	3.815	3.814	0.000	83	473437	50.0	53.9	
66 1,2-Dichloropropane	63	3.842	3.842	0.000	96	214573	50.0	48.4	
68 Dibromomethane	93	3.923	3.923	0.000	95	97065	50.0	44.2	
67 Methyl methacrylate	41	3.923	3.923	0.000	88	179979	100.0	93.6	
69 1,4-Dioxane	88	3.956	3.956	0.000	90	18688	1000.0	1101.8	
71 Dichlorobromomethane	83	4.027	4.027	0.000	100	275592	50.0	47.4	
72 2-Nitropropane	43	4.201	4.201	0.000	97	54515	100.0	96.2	
74 cis-1,3-Dichloropropene	75	4.353	4.353	0.000	98	326753	50.0	48.1	
75 4-Methyl-2-pentanone (MIBK)	58	4.479	4.478	0.001	93	185818	250.0	230.6	
76 Toluene	91	4.604	4.604	0.000	99	1045525	50.0	46.1	
77 trans-1,3-Dichloropropene	75	4.773	4.772	0.001	90	245461	50.0	47.3	
78 Ethyl methacrylate	69	4.854	4.854	0.000	86	179852	50.0	46.8	
79 1,1,2-Trichloroethane	97	4.920	4.919	0.001	90	142659	50.0	43.0	
80 Tetrachloroethene	166	5.028	5.028	0.000	97	278577	50.0	43.7	
81 1,3-Dichloropropane	76	5.050	5.050	0.000	86	263384	50.0	48.0	
82 2-Hexanone	58	5.132	5.132	0.000	92	186687	250.0	286.7	
83 Chlorodibromomethane	127	5.230	5.230	0.000	90	149201	50.0	52.5	
84 n-Butyl acetate	43	5.235	5.235	0.000	97	134075	50.0	55.1	
85 Ethylene Dibromide	107	5.328	5.328	0.000	99	151691	50.0	51.0	
86 1-Chlorohexane	91	5.720	5.720	0.000	92	398604	50.0	58.9	
87 Chlorobenzene	112	5.736	5.736	0.000	96	739382	50.0	51.5	
88 1,1,1,2-Tetrachloroethane	131	5.807	5.807	0.000	95	248457	50.0	51.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.829	5.828	0.001	98	1371194	50.0	60.4	
90 m-Xylene & p-Xylene	91	5.932	5.932	0.000	0	1028577	50.0	57.9	
91 o-Xylene	91	6.280	6.280	0.000	96	1032877	50.0	58.6	
92 Styrene	104	6.297	6.297	0.000	95	798272	50.0	56.9	
93 Bromoform	173	6.455	6.454	0.001	98	96398	50.0	49.6	
94 Isopropylbenzene	105	6.612	6.612	0.000	95	1307331	50.0	59.1	
95 Cyclohexanone	55	6.710	6.705	0.005	90	25763	500.0	386.7	
96 Bromobenzene	77	6.879	6.879	0.000	88	378537	50.0	55.2	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.890	0.000	93	154284	50.0	53.1	
98 1,2,3-Trichloropropane	110	6.928	6.928	0.000	80	46683	50.0	51.2	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.950	0.000	81	32563	50.0	51.9	
100 N-Propylbenzene	91	6.988	6.988	0.000	98	1520030	50.0	64.2	
101 2-Chlorotoluene	91	7.059	7.059	0.000	97	847147	50.0	57.7	
102 1,3,5-Trimethylbenzene	105	7.157	7.157	0.000	95	1060017	50.0	61.1	
103 4-Chlorotoluene	91	7.162	7.162	0.000	98	981989	50.0	58.2	
104 tert-Butylbenzene	119	7.456	7.456	0.000	92	893568	50.0	59.5	
106 1,2,4-Trimethylbenzene	105	7.505	7.505	0.000	96	1172302	50.0	67.4	
107 sec-Butylbenzene	105	7.663	7.663	0.000	93	1328417	50.0	61.1	
108 1,3-Dichlorobenzene	146	7.756	7.755	0.001	98	543760	50.0	54.2	
109 4-Isopropyltoluene	119	7.810	7.804	0.006	97	1146283	50.0	59.4	
110 1,4-Dichlorobenzene	146	7.843	7.843	0.000	95	544362	50.0	50.1	
111 1,2,3-Trimethylbenzene	105	7.897	7.897	0.000	98	1002605	50.0	57.0	
112 Benzyl chloride	91	7.984	7.984	0.000	97	266367	50.0	45.9	
113 1,2-Dichlorobenzene	146	8.191	8.191	0.000	98	476785	50.0	52.3	
114 n-Butylbenzene	91	8.196	8.196	0.000	97	966214	50.0	63.2	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.953	0.000	93	28142	50.0	53.3	
116 1,3,5-Trichlorobenzene	180	9.149	9.149	0.000	98	365107	50.0	54.6	
117 1,2,4-Trichlorobenzene	180	9.781	9.780	0.001	94	278654	50.0	54.3	
118 Hexachlorobutadiene	225	9.977	9.976	0.000	97	140553	50.0	51.3	
119 Naphthalene	128	10.053	10.053	0.000	96	477229	50.0	56.0	
120 1,2,3-Trichlorobenzene	180	10.352	10.352	0.000	96	210790	50.0	52.3	
S 137 1,2-Dichloroethene, Total	1				0		100.0	99.7	
S 138 Trihalomethanes, Total	1				0		200.0	198.6	
S 134 Xylenes, Total	1				0		100.0	116.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	95.4	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

V1_gases_I_00108	Amount Added: 21.50	Units: uL	
V1_Mega_I_00037	Amount Added: 21.50	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:50:55

Chrom Revision: 2.2 14-May-2015 11:41:56

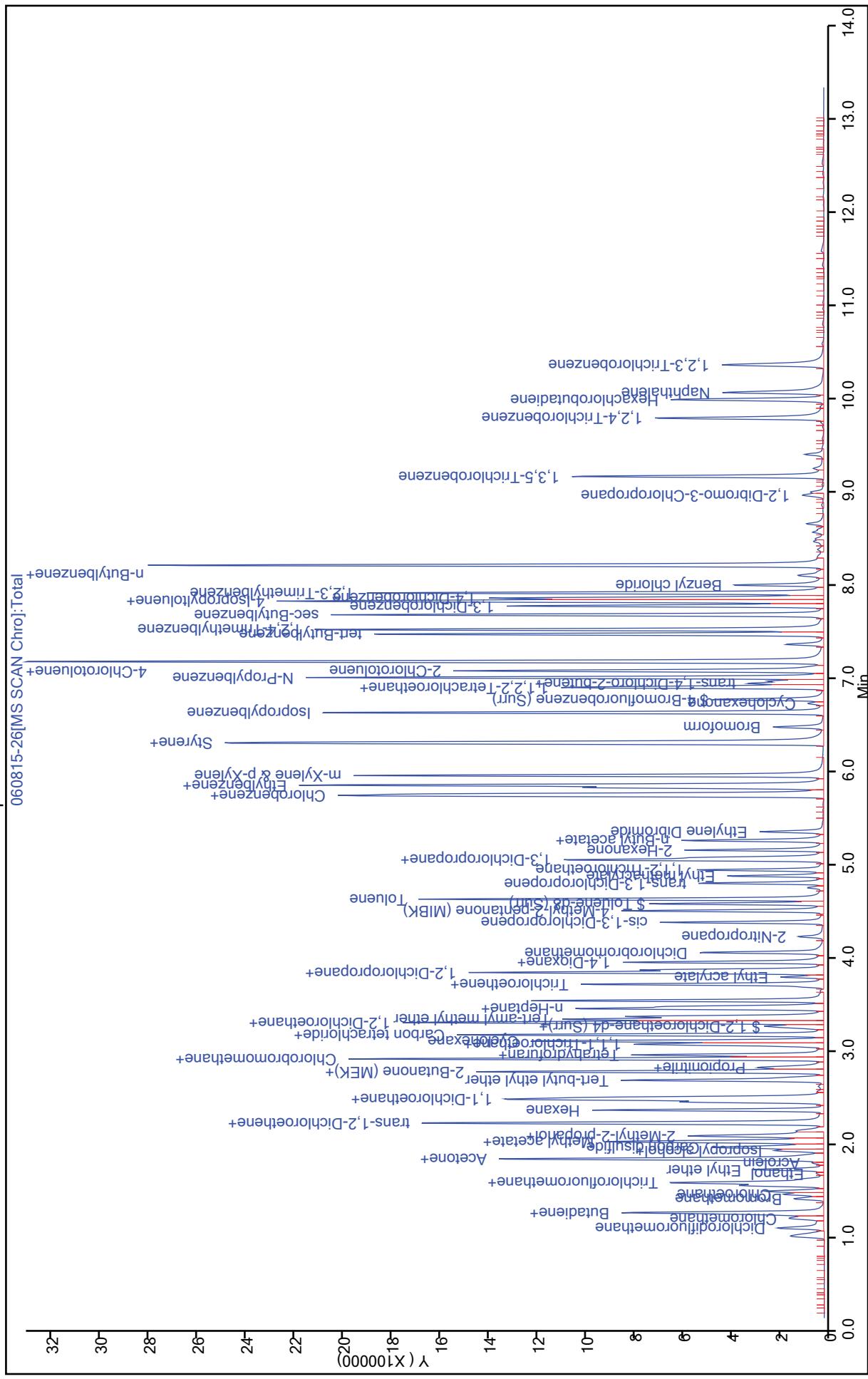
Data File: \\ChromNA\\Nashville  
Injection Date: 08-Jun-2015 21:54:3  
Lims ID: 490-795558-B-2 MS

Instrument ID: HP32  
Date: 4:30  
TestAmerica Nashville  
Nashville|ChromData|HP32|20150608-56175.b|060815-26.D

EML  
24

Purge Vol: 10.000 mL  
Method: 8260HP32

Dil. Factor: 1.0000  
Limit Group: MSV 8260C ICAL



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115 MSD

Lab Sample ID: 490-79645-1 MSD

Matrix: Ground Water

Lab File ID: 060815-06.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 12:46

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	230		5.0	2.7
71-43-2	Benzene	49.5		0.50	0.20
75-25-2	Bromoform	48.9		0.50	0.29
74-83-9	Bromomethane	43.4		0.50	0.35
78-93-3	2-Butanone (MEK)	227		50	2.6
75-15-0	Carbon disulfide	50.9		0.50	0.22
56-23-5	Carbon tetrachloride	47.1		0.50	0.18
108-90-7	Chlorobenzene	50.4		0.50	0.18
124-48-1	Chlorodibromomethane	51.4		0.50	0.25
75-00-3	Chloroethane	58.1		0.50	0.36
67-66-3	Chloroform	48.1		0.50	0.23
74-87-3	Chloromethane	55.9		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	47.9		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	47.7		0.50	0.17
110-82-7	Cyclohexane	53.4		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	51.1		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.3		0.50	0.19
541-73-1	1,3-Dichlorobenzene	54.0		0.50	0.18
106-46-7	1,4-Dichlorobenzene	49.7		0.50	0.17
75-27-4	Dichlorobromomethane	46.5		0.50	0.17
75-71-8	Dichlorodifluoromethane	55.7		0.50	0.17
75-34-3	1,1-Dichloroethane	50.6		0.50	0.24
107-06-2	1,2-Dichloroethane	43.3		0.50	0.20
75-35-4	1,1-Dichloroethene	52.2		0.50	0.25
78-87-5	1,2-Dichloropropane	48.2		0.50	0.25
100-41-4	Ethylbenzene	55.6		0.50	0.19
106-93-4	1,2-Dibromoethane	49.6		0.50	0.21
591-78-6	2-Hexanone	270		5.0	1.3
98-82-8	Isopropylbenzene	56.5		1.0	0.33
79-20-9	Methyl acetate	229		10	0.58
108-87-2	Methylcyclohexane	51.8		0.50	0.090
75-09-2	Methylene Chloride	52.3		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	220		5.0	0.81
1634-04-4	Methyl tert-butyl ether	46.4		0.50	0.17
100-42-5	Styrene	55.8		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	51.2		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: OB-20A-060115 MSD

Lab Sample ID: 490-79645-1 MSD

Matrix: Ground Water

Lab File ID: 060815-06.D

Analysis Method: 8260C

Date Collected: 06/01/2015 10:50

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 12:46

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254074

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	43.1		0.50	0.14
108-88-3	Toluene	44.7		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	51.8		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	46.2		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	55.0		0.50	0.20
71-55-6	1,1,1-Trichloroethane	46.3		0.50	0.19
79-00-5	1,1,2-Trichloroethane	41.2		0.50	0.19
79-01-6	Trichloroethene	47.1		0.50	0.20
75-69-4	Trichlorofluoromethane	50.2		0.50	0.21
76-13-1	Freon-113	50.6		1.0	0.15
75-01-4	Vinyl chloride	61.0		0.50	0.18
1330-20-7	Xylenes, Total	112		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	118		70-130
1868-53-7	Dibromofluoromethane (Surr)	94		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\060815-06.D  
 Lims ID: 490-79645-B-1 MSD  
 Client ID: OB-20A-060115  
 Sample Type: MSD  
 Inject. Date: 08-Jun-2015 12:46:30 ALS Bottle#: 6 Worklist Smp#: 27  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79645-B-1 MSD  
 Misc. Info.: 490-0056110-027  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56110.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 10-Jun-2015 10:09:42 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN

Process Host: XAWRK012

First Level Reviewer: larsene Date: 10-Jun-2015 10:10:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.446	0.004	99	440357	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.715	5.711	0.004	84	343605	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.822	7.823	-0.001	93	179363	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.026	3.027	-0.001	94	100045	25.0	23.6	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.238	3.239	-0.001	0	87544	25.0	23.4	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.551	0.004	92	409956	25.0	24.0	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.749	6.750	-0.001	94	156290	25.0	29.5	
10 Dichlorodifluoromethane	85	1.066	1.063	0.003	99	278685	50.0	55.7	
11 Chloromethane	50	1.170	1.177	-0.007	98	240693	50.0	55.9	
12 Vinyl chloride	62	1.213	1.216	-0.003	97	302323	50.0	61.0	
13 Butadiene	54	1.230	1.232	-0.002	87	285465	50.0	64.7	
14 Bromomethane	96	1.382	1.379	0.003	90	155542	50.0	43.4	
15 Chloroethane	64	1.431	1.428	0.003	99	182869	50.0	58.1	
16 Dichlorofluoromethane	67	1.523	1.526	-0.003	97	437682	50.0	55.2	
17 Trichlorofluoromethane	101	1.551	1.553	-0.002	98	416376	50.0	50.2	
18 Ethanol	45	1.654	1.651	0.003	96	16738	2000.0	2114.9	
19 Ethyl ether	59	1.692	1.695	-0.003	87	140076	50.0	50.3	
20 Acrolein	56	1.768	1.771	-0.003	99	40796	125.0	126.1	
21 1,1,2-Trichloro-1,2,2-trif	101	1.807	1.803	0.003	93	253828	50.0	50.6	
22 1,1-Dichloroethene	96	1.812	1.814	-0.002	96	240551	50.0	52.2	
23 Acetone	58	1.845	1.842	0.003	100	37660	250.0	229.8	
24 Iodomethane	142	1.899	1.896	0.003	97	210813	50.0	32.1	
25 Isopropyl alcohol	45	1.910	1.912	-0.002	100	42267	500.0	471.0	
26 Carbon disulfide	76	1.932	1.934	-0.002	98	617788	50.0	50.9	
28 Acetonitrile	41	1.992	1.994	-0.002	76	401213	500.0	515.7	
29 3-Chloro-1-propene	76	1.992	1.994	-0.002	93	238075	NC	NC	
30 Methyl acetate	43	2.002	2.005	-0.003	96	353744	250.0	229.4	
31 Methylene Chloride	84	2.057	2.059	-0.002	86	234569	50.0	52.3	
32 2-Methyl-2-propanol	59	2.117	2.114	0.003	99	72651	500.0	457.8	
33 Acrylonitrile	53	2.188	2.190	-0.002	99	360083	500.0	475.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	61	2.193	2.195	-0.002	89	316973	50.0	51.8	
35 Methyl tert-butyl ether	73	2.198	2.195	0.003	94	428201	50.0	46.4	
36 Hexane	57	2.335	2.337	-0.002	88	372636	50.0	58.1	
37 1,1-Dichloroethane	63	2.422	2.424	-0.002	96	417737	50.0	50.6	
39 Vinyl acetate	43	2.449	2.446	0.003	97	725342	100.0	94.1	
38 Isopropyl ether	45	2.449	2.451	-0.002	83	591521	50.0	49.2	
40 2-Chloro-1,3-butadiene	53	2.471	2.473	-0.002	89	355801	50.0	51.7	
41 Tert-butyl ethyl ether	59	2.656	2.658	-0.002	97	533850	50.0	48.2	
43 2,2-Dichloropropane	77	2.748	2.745	0.003	76	365722	50.0	51.1	
42 cis-1,2-Dichloroethene	61	2.748	2.745	0.003	80	350734	50.0	47.9	
44 2-Butanone (MEK)	72	2.765	2.762	0.003	97	58625	250.0	227.3	
45 Ethyl acetate	43	2.786	2.789	-0.003	99	181404	100.0	93.2	
46 Propionitrile	54	2.803	2.800	0.003	99	129202	500.0	465.6	
47 Methacrylonitrile	41	2.884	2.881	0.003	89	552799	500.0	440.4	
48 Chlorobromomethane	130	2.890	2.887	0.003	78	135267	50.0	44.6	
50 Chloroform	83	2.928	2.930	-0.002	92	402202	50.0	48.1	
49 Tetrahydrofuran	42	2.928	2.930	-0.002	72	48922	100.0	83.7	
51 1,1,1-Trichloroethane	97	3.042	3.045	-0.003	97	368655	50.0	46.3	
53 Cyclohexane	56	3.075	3.077	-0.002	86	429324	50.0	53.4	
54 1,1-Dichloropropene	75	3.140	3.143	-0.003	97	343159	50.0	50.7	
55 Carbon tetrachloride	117	3.146	3.148	-0.002	91	331048	50.0	47.1	
56 Isobutyl alcohol	43	3.222	3.219	0.003	95	72543	1250.0	1064.1	
57 Benzene	78	3.276	3.273	0.003	95	989565	50.0	49.5	
58 t-Amyl alcohol	59	3.282	3.284	-0.002	77	55161	500.0	396.7	
59 1,2-Dichloroethane	62	3.287	3.284	0.003	98	227206	50.0	43.3	
60 Tert-amyl methyl ether	73	3.342	3.344	-0.002	98	453607	50.0	46.1	
61 n-Heptane	43	3.423	3.426	-0.003	91	314621	50.0	56.1	
62 n-Butanol	56	3.663	3.660	0.003	85	50933	1250.0	1109.4	
63 Trichloroethene	130	3.690	3.687	0.003	97	275232	50.0	47.1	
64 Ethyl acrylate	55	3.766	3.763	0.003	99	125399	50.0	49.1	
65 Methylcyclohexane	83	3.815	3.818	-0.003	86	467759	50.0	51.8	
66 1,2-Dichloropropane	63	3.842	3.845	-0.003	96	219641	50.0	48.2	
67 Methyl methacrylate	41	3.924	3.921	0.003	89	177698	100.0	89.8	
68 Dibromomethane	93	3.924	3.926	-0.002	92	97466	50.0	43.2	
69 1,4-Dioxane	88	3.957	3.954	0.003	90	16092	1000.0	922.5	
71 Dichlorobromomethane	83	4.027	4.030	-0.003	99	278357	50.0	46.5	
72 2-Nitropropane	43	4.202	4.204	-0.002	96	51191	100.0	87.8	
74 cis-1,3-Dichloropropene	75	4.354	4.356	-0.002	97	333073	50.0	47.7	
75 4-Methyl-2-pentanone (MIBK)	58	4.479	4.476	0.003	93	182847	250.0	220.4	
76 Toluene	91	4.604	4.601	0.003	99	1044689	50.0	44.7	
77 trans-1,3-Dichloropropene	75	4.773	4.776	-0.003	90	247003	50.0	46.2	
78 Ethyl methacrylate	69	4.855	4.852	0.003	86	177778	50.0	44.9	
79 1,1,2-Trichloroethane	97	4.920	4.917	0.003	89	140762	50.0	41.2	
80 Tetrachloroethene	166	5.024	5.026	-0.002	97	282825	50.0	43.1	
81 1,3-Dichloropropane	76	5.051	5.053	-0.002	86	263681	50.0	46.7	
82 2-Hexanone	58	5.132	5.129	0.003	93	181124	250.0	270.2	
83 Chlorodibromomethane	127	5.230	5.233	-0.003	90	150474	50.0	51.4	
84 n-Butyl acetate	43	5.236	5.238	-0.002	97	137539	50.0	55.0	
85 Ethylene Dibromide	107	5.328	5.331	-0.003	99	151762	50.0	49.6	
86 1-Chlorohexane	91	5.720	5.717	0.003	93	404934	50.0	58.2	
87 Chlorobenzene	112	5.737	5.739	-0.002	96	746094	50.0	50.4	
88 1,1,1,2-Tetrachloroethane	131	5.802	5.804	-0.002	96	253074	50.0	51.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.829	5.832	-0.003	97	1297905	50.0	55.6	
90 m-Xylene & p-Xylene	91	5.933	5.935	-0.002	0	1012882	50.0	55.4	
91 o-Xylene	91	6.281	6.278	0.003	96	1018056	50.0	56.1	
92 Styrene	104	6.292	6.294	-0.002	95	805875	50.0	55.8	
93 Bromoform	173	6.455	6.458	-0.003	98	97994	50.0	48.9	
94 Isopropylbenzene	105	6.613	6.610	0.003	95	1285890	50.0	56.5	
95 Cyclohexanone	55	6.706	6.708	-0.002	89	23876	500.0	348.6	
96 Bromobenzene	77	6.880	6.877	0.003	88	385522	50.0	54.9	
97 1,1,2,2-Tetrachloroethane	83	6.891	6.893	-0.002	93	152368	50.0	51.2	
98 1,2,3-Trichloropropane	110	6.929	6.929	0.003	25	46994	50.0	50.3	
99 trans-1,4-Dichloro-2-butene	53	6.951	6.948	0.003	81	34870	50.0	54.2	
100 N-Propylbenzene	91	6.989	6.986	0.003	98	1469516	50.0	60.6	
101 2-Chlorotoluene	91	7.059	7.062	-0.003	98	848887	50.0	56.4	
103 4-Chlorotoluene	91	7.163	7.160	0.003	98	986643	50.0	57.0	
102 1,3,5-Trimethylbenzene	105	7.157	7.160	-0.003	95	1054324	50.0	59.3	
104 tert-Butylbenzene	119	7.457	7.454	0.003	92	908284	50.0	59.0	
106 1,2,4-Trimethylbenzene	105	7.506	7.503	0.003	96	1056940	50.0	59.3	
107 sec-Butylbenzene	105	7.664	7.661	0.003	94	1355780	50.0	60.8	
108 1,3-Dichlorobenzene	146	7.756	7.759	-0.003	98	555402	50.0	54.0	
109 4-Isopropyltoluene	119	7.805	7.808	-0.003	96	1172950	50.0	59.3	
110 1,4-Dichlorobenzene	146	7.843	7.846	-0.003	95	553910	50.0	49.7	
111 1,2,3-Trimethylbenzene	105	7.898	7.900	-0.002	98	1002576	50.0	55.6	
112 Benzyl chloride	91	7.979	7.982	-0.003	98	291416	50.0	48.8	
113 1,2-Dichlorobenzene	146	8.192	8.194	-0.002	97	479657	50.0	51.3	
114 n-Butylbenzene	91	8.197	8.194	0.003	97	988218	50.0	63.0	
115 1,2-Dibromo-3-Chloropropan	157	8.954	8.951	0.003	92	27640	50.0	51.1	
116 1,3,5-Trichlorobenzene	180	9.150	9.152	-0.002	98	380855	50.0	55.6	
117 1,2,4-Trichlorobenzene	180	9.776	9.778	-0.002	94	289590	50.0	55.0	
118 Hexachlorobutadiene	225	9.977	9.980	-0.003	96	152890	50.0	54.4	
119 Naphthalene	128	10.053	10.056	-0.003	96	446576	50.0	51.1	
120 1,2,3-Trichlorobenzene	180	10.353	10.350	0.003	96	220592	50.0	53.4	
S 134 Xylenes, Total	1				0		100.0	111.5	
S 135 1,3-Dichloropropene, Total	1				0		100.0	93.9	
S 137 1,2-Dichloroethene, Total	1				0		100.0	99.7	
S 138 Trihalomethanes, Total	1				0		200.0	195.0	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

V1\_Mega\_I\_00037  
V1\_gases\_I\_00107  
VOA\_ISSS\_50\_W\_00026

Amount Added: 21.50 Units: uL  
Amount Added: 21.50 Units: uL  
Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Jun-2015 10:10:54

Chrom Revision: 2.2 14-May-2015 11:41:56

TestAmerica Nashville

\\ChromNA\\Nashville\\ChromData\\HP32\\2015-06-08-Jun-2015 12:46:30  
490-79645-B-1 MSD

Data File: Injection Date

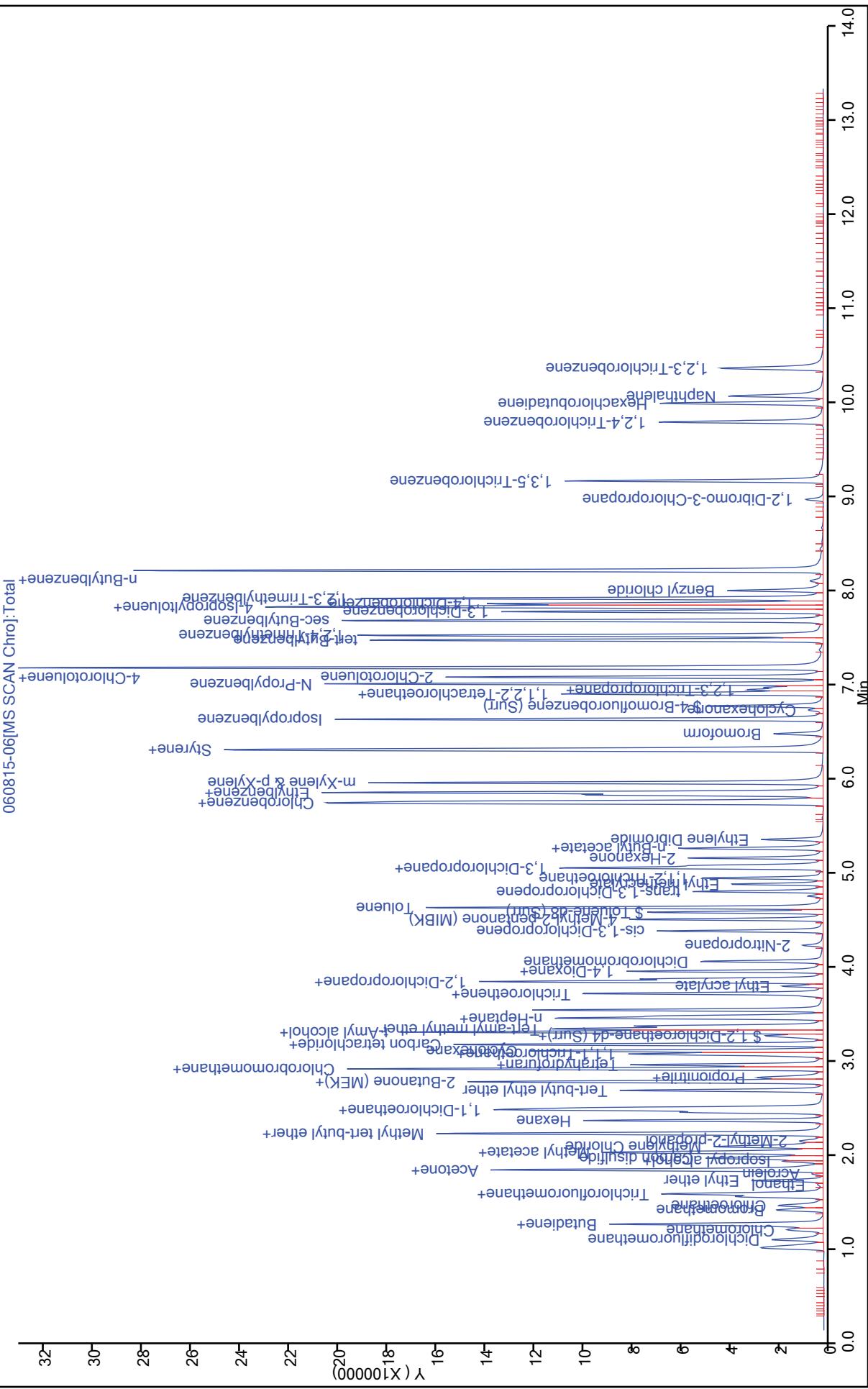
33 Jan. 2013 12:13:33  
490-79645-B-1 MSD  
OD 20A 000115

Client ID:  
Purge Vol:

Dil Factor: 1 0000 A/S Bottles: 6

MSV 8260C ICAL

060815-06[MS SCAN Chro]:Total



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SC-01-060215 MSD

Lab Sample ID: 490-79781-1 MSD

Matrix: Ground Water

Lab File ID: 060515-27.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 23:07

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	217		5.0	2.7
71-43-2	Benzene	49.7		0.50	0.20
75-25-2	Bromoform	52.0		0.50	0.29
74-83-9	Bromomethane	34.7		0.50	0.35
78-93-3	2-Butanone (MEK)	231		50	2.6
75-15-0	Carbon disulfide	44.9		0.50	0.22
56-23-5	Carbon tetrachloride	47.4		0.50	0.18
108-90-7	Chlorobenzene	49.5		0.50	0.18
124-48-1	Chlorodibromomethane	52.9		0.50	0.25
75-00-3	Chloroethane	51.8		0.50	0.36
67-66-3	Chloroform	47.6		0.50	0.23
74-87-3	Chloromethane	43.0		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	45.7		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	50.9		0.50	0.17
110-82-7	Cyclohexane	49.5		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	54.6		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.3		0.50	0.19
541-73-1	1,3-Dichlorobenzene	52.7		0.50	0.18
106-46-7	1,4-Dichlorobenzene	48.6		0.50	0.17
75-27-4	Dichlorobromomethane	46.8		0.50	0.17
75-71-8	Dichlorodifluoromethane	41.2		0.50	0.17
75-34-3	1,1-Dichloroethane	46.6		0.50	0.24
107-06-2	1,2-Dichloroethane	44.1		0.50	0.20
75-35-4	1,1-Dichloroethene	48.1		0.50	0.25
78-87-5	1,2-Dichloropropane	47.7		0.50	0.25
100-41-4	Ethylbenzene	53.7		0.50	0.19
106-93-4	1,2-Dibromoethane	49.8		0.50	0.21
591-78-6	2-Hexanone	269		5.0	1.3
98-82-8	Isopropylbenzene	57.0		1.0	0.33
79-20-9	Methyl acetate	223		10	0.58
108-87-2	Methylcyclohexane	48.0		0.50	0.090
75-09-2	Methylene Chloride	49.2		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	251		5.0	0.81
1634-04-4	Methyl tert-butyl ether	46.0		0.50	0.17
100-42-5	Styrene	54.9		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	50.3		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: SC-01-060215 MSD

Lab Sample ID: 490-79781-1 MSD

Matrix: Ground Water

Lab File ID: 060515-27.D

Analysis Method: 8260C

Date Collected: 06/02/2015 09:45

Sample wt/vol: 10 (mL)

Date Analyzed: 06/05/2015 23:07

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 253850

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	44.7		0.50	0.14
108-88-3	Toluene	46.9		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	47.2		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	49.0		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	53.5		0.50	0.20
71-55-6	1,1,1-Trichloroethane	46.2		0.50	0.19
79-00-5	1,1,2-Trichloroethane	44.5		0.50	0.19
79-01-6	Trichloroethene	47.5		0.50	0.20
75-69-4	Trichlorofluoromethane	45.1		0.50	0.21
76-13-1	Freon-113	43.9		1.0	0.15
75-01-4	Vinyl chloride	51.2		0.50	0.18
1330-20-7	Xylenes, Total	155		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-27.D  
 Lims ID: 490-79781-C-1 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 05-Jun-2015 23:07:30 ALS Bottle#: 27 Worklist Smp#: 27  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79781-C-1 MSD  
 Misc. Info.: 490-0056059-027  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 08-Jun-2015 13:24:53 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK021

First Level Reviewer: larsene Date: 08-Jun-2015 13:52:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.450	3.447	0.003	99	435679	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.714	5.711	0.003	84	316147	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.821	7.823	-0.002	94	173872	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.025	3.028	-0.003	94	101457	25.0	24.2	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.237	3.240	-0.003	0	89460	25.0	24.2	
\$ 6 Toluene-d8 (Surr)	98	4.555	4.552	0.003	92	404367	25.0	25.7	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.754	6.751	0.003	96	142361	25.0	27.7	
10 Dichlorodifluoromethane	85	1.065	1.063	0.002	99	203984	50.0	41.2	
11 Chloromethane	50	1.174	1.177	-0.003	99	183330	50.0	43.0	
12 Vinyl chloride	62	1.212	1.215	-0.003	97	251210	50.0	51.2	
13 Butadiene	54	1.234	1.231	0.003	88	228215	50.0	52.3	
14 Bromomethane	96	1.381	1.378	0.003	91	123062	50.0	34.7	
15 Chloroethane	64	1.430	1.427	0.003	99	161410	50.0	51.8	
16 Dichlorofluoromethane	67	1.523	1.520	0.003	97	389421	50.0	49.6	
17 Trichlorofluoromethane	101	1.555	1.552	0.003	98	370527	50.0	45.1	
18 Ethanol	45	1.653	1.661	-0.008	97	14732	2000.0	1879.2	
19 Ethyl ether	59	1.697	1.694	0.003	87	130056	50.0	47.2	
20 Acrolein	56	1.768	1.765	0.003	100	38094	125.0	119.0	
21 1,1,2-Trichloro-1,2,2-trif	101	1.806	1.803	0.003	95	217751	50.0	43.9	
22 1,1-Dichloroethene	96	1.811	1.808	0.003	96	219395	50.0	48.1	
23 Acetone	58	1.844	1.846	-0.002	100	35170	250.0	216.8	
24 Iodomethane	142	1.898	1.895	0.003	97	223260	50.0	34.4	
25 Isopropyl alcohol	45	1.915	1.912	0.003	99	36757	500.0	413.6	
26 Carbon disulfide	76	1.936	1.934	0.002	99	540120	50.0	44.9	
28 Acetonitrile	41	1.991	1.988	0.003	76	364365	500.0	473.4	
29 3-Chloro-1-propene	76	1.991	1.993	-0.002	92	216003	NC	NC	
30 Methyl acetate	43	2.002	2.004	-0.002	96	340587	250.0	223.2	
31 Methylene Chloride	84	2.056	2.053	0.003	86	218056	50.0	49.2	
32 2-Methyl-2-propanol	59	2.116	2.119	-0.003	99	66879	500.0	426.0	
33 Acrylonitrile	53	2.187	2.189	-0.002	99	345172	500.0	460.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.198	2.195	0.003	95	420175	50.0	46.0	
34 trans-1,2-Dichloroethene	61	2.198	2.195	0.003	85	285580	50.0	47.2	
36 Hexane	57	2.334	2.336	-0.002	89	289851	50.0	45.7	
37 1,1-Dichloroethane	63	2.421	2.423	-0.002	96	380487	50.0	46.6	
39 Vinyl acetate	43	2.448	2.445	0.003	97	706814	100.0	92.7	
38 Isopropyl ether	45	2.454	2.451	0.003	83	566540	50.0	47.6	
40 2-Chloro-1,3-butadiene	53	2.470	2.472	-0.002	90	329566	50.0	48.4	
41 Tert-butyl ethyl ether	59	2.655	2.658	-0.003	96	515919	50.0	47.1	
42 cis-1,2-Dichloroethene	61	2.747	2.745	0.002	79	331112	50.0	45.7	
43 2,2-Dichloropropane	77	2.747	2.745	0.002	74	330710	50.0	46.7	
44 2-Butanone (MEK)	72	2.764	2.766	-0.002	99	58840	250.0	230.6	
45 Ethyl acetate	43	2.786	2.788	-0.002	98	189616	100.0	98.4	
46 Propionitrile	54	2.802	2.799	0.003	99	127775	500.0	465.4	
47 Methacrylonitrile	41	2.884	2.886	-0.002	90	569841	500.0	458.9	
48 Chlorobromomethane	130	2.889	2.886	0.003	77	135393	50.0	45.1	
50 Chloroform	83	2.927	2.924	0.003	92	394141	50.0	47.6	
49 Tetrahydrofuran	42	2.927	2.930	-0.003	74	51954	100.0	89.9	
51 1,1,1-Trichloroethane	97	3.041	3.044	-0.003	97	363583	50.0	46.2	
53 Cyclohexane	56	3.080	3.077	0.003	87	394248	50.0	49.5	
54 1,1-Dichloropropene	75	3.145	3.142	0.003	96	326665	50.0	48.8	
55 Carbon tetrachloride	117	3.145	3.142	0.003	94	330103	50.0	47.4	
56 Isobutyl alcohol	43	3.221	3.224	-0.003	95	72006	1250.0	1067.5	
57 Benzene	78	3.275	3.273	0.002	95	983469	50.0	49.7	
58 t-Amyl alcohol	59	3.281	3.283	-0.002	57	55833	500.0	405.9	
59 1,2-Dichloroethane	62	3.286	3.283	0.003	97	228530	50.0	44.1	
60 Tert-amyl methyl ether	73	3.341	3.343	-0.002	98	449558	50.0	46.1	
61 n-Heptane	43	3.428	3.425	0.003	88	265043	50.0	47.8	
62 n-Butanol	56	3.662	3.665	-0.003	85	47858	1250.0	1053.6	
63 Trichloroethene	130	3.689	3.686	0.003	97	274584	50.0	47.5	
64 Ethyl acrylate	55	3.765	3.763	0.002	99	128910	50.0	51.1	
65 Methylcyclohexane	83	3.814	3.812	0.002	86	428182	50.0	48.0	
66 1,2-Dichloropropane	63	3.842	3.844	-0.002	95	214982	50.0	47.7	
67 Methyl methacrylate	41	3.923	3.920	0.003	87	186235	100.0	95.2	
68 Dibromomethane	93	3.929	3.926	0.003	89	99779	50.0	44.7	
69 1,4-Dioxane	88	3.956	3.958	-0.002	90	12880	1000.0	746.3	
71 Dichlorobromomethane	83	4.032	4.029	0.003	99	276893	50.0	46.8	
72 2-Nitropropane	43	4.201	4.198	0.003	97	57664	100.0	100.0	
74 cis-1,3-Dichloropropene	75	4.353	4.356	-0.003	97	327277	50.0	50.9	
75 4-Methyl-2-pentanone (MIBK)	58	4.478	4.481	-0.003	94	191620	250.0	251.1	
76 Toluene	91	4.604	4.606	-0.002	99	1007288	50.0	46.9	
77 trans-1,3-Dichloropropene	75	4.772	4.775	-0.003	91	240983	50.0	49.0	
78 Ethyl methacrylate	69	4.854	4.851	0.003	87	178169	50.0	48.9	
79 1,1,2-Trichloroethane	97	4.919	4.917	0.002	90	139946	50.0	44.5	
80 Tetrachloroethene	166	5.028	5.025	0.003	97	269864	50.0	44.7	
81 1,3-Dichloropropane	76	5.050	5.053	-0.003	87	249385	50.0	48.0	
82 2-Hexanone	58	5.132	5.134	-0.002	93	165826	250.0	268.9	
83 Chlorodibromomethane	127	5.230	5.232	-0.002	90	142405	50.0	52.9	
84 n-Butyl acetate	43	5.235	5.238	-0.003	98	126359	50.0	51.1	
85 Ethylene Dibromide	107	5.328	5.330	-0.002	99	140334	50.0	49.8	
86 1-Chlorohexane	91	5.720	5.717	0.003	93	347454	50.0	50.4	
87 Chlorobenzene	112	5.736	5.739	-0.002	96	674132	50.0	49.5	
88 1,1,1,2-Tetrachloroethane	131	5.807	5.804	0.003	95	236109	50.0	51.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.828	5.831	-0.003	97	1155091	50.0	53.7	
90 m-Xylene & p-Xylene	91	5.932	5.934	-0.002	0	1638733	50.0	97.5	
91 o-Xylene	91	6.280	6.277	0.003	96	963956	50.0	57.7	
92 Styrene	104	6.297	6.294	0.003	95	729442	50.0	54.9	
93 Bromoform	173	6.454	6.457	-0.003	98	95729	50.0	52.0	
94 Isopropylbenzene	105	6.612	6.609	0.003	95	1194174	50.0	57.0	
95 Cyclohexanone	55	6.710	6.707	0.003	89	19497	500.0	287.8	
96 Bromobenzene	77	6.879	6.876	0.003	88	346758	50.0	50.9	
97 1,1,2,2-Tetrachloroethane	83	6.890	6.893	-0.003	94	145170	50.0	50.3	
98 1,2,3-Trichloropropane	110	6.928	6.925	0.003	81	45631	50.0	50.4	
99 trans-1,4-Dichloro-2-butene	53	6.950	6.952	-0.002	82	33751	50.0	54.1	
100 N-Propylbenzene	91	6.988	6.991	-0.002	98	1334997	50.0	56.8	
101 2-Chlorotoluene	91	7.059	7.061	-0.002	97	769340	50.0	52.8	
102 1,3,5-Trimethylbenzene	105	7.157	7.159	-0.002	95	989860	50.0	57.4	
103 4-Chlorotoluene	91	7.162	7.165	-0.003	98	909594	50.0	54.2	
104 tert-Butylbenzene	119	7.456	7.453	0.003	92	837495	50.0	56.2	
106 1,2,4-Trimethylbenzene	105	7.505	7.502	0.003	97	1075894	50.0	62.2	
107 sec-Butylbenzene	105	7.663	7.660	0.003	94	1242524	50.0	57.5	
108 1,3-Dichlorobenzene	146	7.755	7.758	-0.003	98	525323	50.0	52.7	
109 4-Isopropyltoluene	119	7.804	7.807	-0.003	96	1093700	50.0	57.0	
110 1,4-Dichlorobenzene	146	7.843	7.845	-0.002	95	524691	50.0	48.6	
111 1,2,3-Trimethylbenzene	105	7.897	7.900	-0.003	98	1007128	50.0	57.6	
112 Benzyl chloride	91	7.984	7.981	0.003	98	246568	50.0	44.9	
113 1,2-Dichlorobenzene	146	8.191	8.194	-0.003	97	465181	50.0	51.3	
114 n-Butylbenzene	91	8.196	8.199	-0.003	97	913070	50.0	60.1	
115 1,2-Dibromo-3-Chloropropan	157	8.953	8.950	0.003	93	28633	50.0	54.6	
116 1,3,5-Trichlorobenzene	180	9.149	9.152	-0.003	98	359972	50.0	54.2	
117 1,2,4-Trichlorobenzene	180	9.775	9.778	-0.003	94	272819	50.0	53.5	
118 Hexachlorobutadiene	225	9.976	9.979	-0.003	97	138496	50.0	50.9	
119 Naphthalene	128	10.053	10.055	-0.002	96	493281	50.0	58.2	
120 1,2,3-Trichlorobenzene	180	10.352	10.349	0.003	95	206505	50.0	51.5	
S 137 1,2-Dichloroethene, Total	1				0		100.0	92.9	
S 138 Trihalomethanes, Total	1				0		200.0	199.3	
S 134 Xylenes, Total	1				0		100.0	155.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	99.9	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

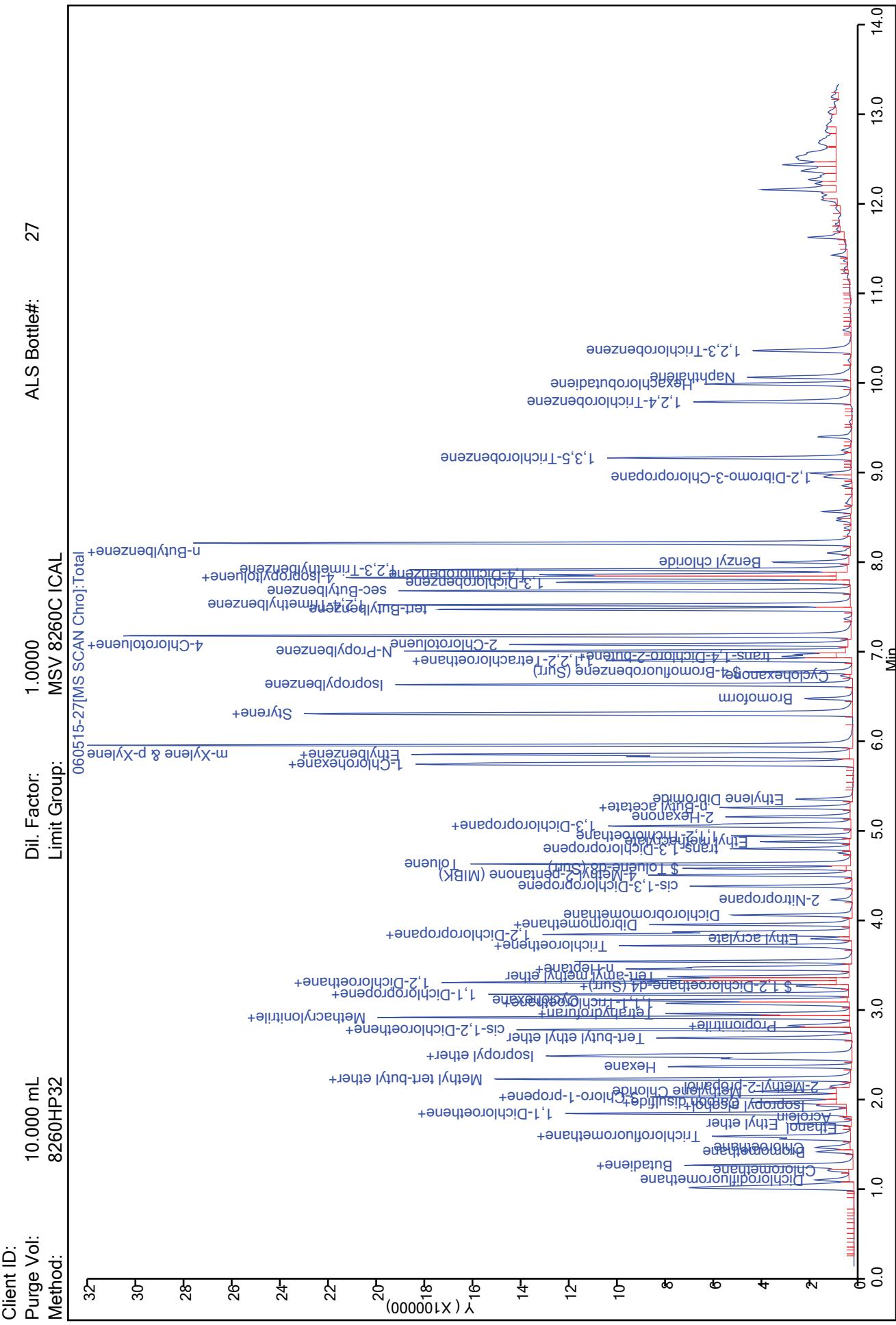
V1\_gases\_I\_00107  
V1\_Mega\_I\_00037  
VOA\_ISSS\_50\_W\_00026

Amount Added: 21.50 Units: uL  
Amount Added: 21.50 Units: uL  
Amount Added: 5.00 Units: uL Run Reagent

Report Date: 08-Jun-2015 14:26:44

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150605-56059.b\\060515-27.D  
Injection Date: 05-Jun-2015 23:07:30  
Lims ID: 490-79781-C-1 MSD  
Instrument ID: HP32  
TestAmerica Nashville



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: 490-79558-C-2 MSD

Matrix: Water

Lab File ID: 060815-27.D

Analysis Method: 8260C

Date Collected: 05/28/2015 09:35

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 22:21

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	255		5.0	2.7
71-43-2	Benzene	50.3		0.50	0.20
75-25-2	Bromoform	49.2		0.50	0.29
74-83-9	Bromomethane	33.8		0.50	0.35
78-93-3	2-Butanone (MEK)	234		50	2.6
75-15-0	Carbon disulfide	49.2		0.50	0.22
56-23-5	Carbon tetrachloride	46.7		0.50	0.18
108-90-7	Chlorobenzene	50.4		0.50	0.18
124-48-1	Chlorodibromomethane	51.8		0.50	0.25
75-00-3	Chloroethane	57.9		0.50	0.36
67-66-3	Chloroform	48.7		0.50	0.23
74-87-3	Chloromethane	52.6		0.50	0.36
156-59-2	cis-1,2-Dichloroethene	47.7		0.50	0.21
10061-01-5	cis-1,3-Dichloropropene	47.3		0.50	0.17
110-82-7	Cyclohexane	55.8		1.0	0.13
96-12-8	1,2-Dibromo-3-Chloropropane	52.8		5.0	0.94
95-50-1	1,2-Dichlorobenzene	51.9		0.50	0.19
541-73-1	1,3-Dichlorobenzene	54.0		0.50	0.18
106-46-7	1,4-Dichlorobenzene	50.9		0.50	0.17
75-27-4	Dichlorobromomethane	46.9		0.50	0.17
75-71-8	Dichlorodifluoromethane	51.5		0.50	0.17
75-34-3	1,1-Dichloroethane	50.2		0.50	0.24
107-06-2	1,2-Dichloroethane	43.1		0.50	0.20
75-35-4	1,1-Dichloroethene	52.6		0.50	0.25
78-87-5	1,2-Dichloropropane	48.4		0.50	0.25
100-41-4	Ethylbenzene	59.4		0.50	0.19
106-93-4	1,2-Dibromoethane	49.9		0.50	0.21
591-78-6	2-Hexanone	277		5.0	1.3
98-82-8	Isopropylbenzene	58.4		1.0	0.33
79-20-9	Methyl acetate	228		10	0.58
108-87-2	Methylcyclohexane	53.2		0.50	0.090
75-09-2	Methylene Chloride	53.9		3.0	0.22
108-10-1	4-Methyl-2-pentanone (MIBK)	226		5.0	0.81
1634-04-4	Methyl tert-butyl ether	47.1		0.50	0.17
100-42-5	Styrene	55.9		0.50	0.28
79-34-5	1,1,2,2-Tetrachloroethane	52.3		0.50	0.19

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_

Lab Sample ID: 490-79558-C-2 MSD

Matrix: Water

Lab File ID: 060815-27.D

Analysis Method: 8260C

Date Collected: 05/28/2015 09:35

Sample wt/vol: 10 (mL)

Date Analyzed: 06/08/2015 22:21

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 254379

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	43.0		0.50	0.14
108-88-3	Toluene	45.5		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	51.3		0.50	0.23
10061-02-6	trans-1,3-Dichloropropene	46.3		0.50	0.17
120-82-1	1,2,4-Trichlorobenzene	54.2		0.50	0.20
71-55-6	1,1,1-Trichloroethane	46.4		0.50	0.19
79-00-5	1,1,2-Trichloroethane	42.7		0.50	0.19
79-01-6	Trichloroethene	47.5		0.50	0.20
75-69-4	Trichlorofluoromethane	48.5		0.50	0.21
76-13-1	Freon-113	50.2		1.0	0.15
75-01-4	Vinyl chloride	59.4		0.50	0.18
1330-20-7	Xylenes, Total	115		1.0	0.58

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	119		70-130
1868-53-7	Dibromofluoromethane (Surr)	95		70-130
2037-26-5	Toluene-d8 (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-130

TestAmerica Nashville  
Target Compound Quantitation Report

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-27.D  
 Lims ID: 490-79558-C-2 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 08-Jun-2015 22:21:30 ALS Bottle#: 27 Worklist Smp#: 25  
 Purge Vol: 10.000 mL Dil. Factor: 1.0000  
 Sample Info: 490-79558-C-2 MSD  
 Misc. Info.: 490-0056175-025  
 Operator ID: EML Instrument ID: HP32  
 Method: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\8260HP32.m  
 Limit Group: MSV 8260C ICAL  
 Method Label: 8260B Volatile Organics 8260/SA/NV05-90  
 Last Update: 09-Jun-2015 11:48:55 Calib Date: 18-May-2015 20:46:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150518-55131.b\\051815-25.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK001

First Level Reviewer: larsene Date: 09-Jun-2015 11:51:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene (IS)	96	3.447	3.450	-0.003	99	433269	25.0	25.0	
* 2 Chlorobenzene-d5	117	5.712	5.714	-0.002	83	340556	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	7.824	7.821	0.003	94	174948	25.0	25.0	
\$ 4 Dibromofluoromethane (Surr)	111	3.028	3.025	0.003	94	99556	25.0	23.9	
\$ 5 1,2-Dichloroethane-d4 (Sur)	65	3.240	3.237	0.003	0	86690	25.0	23.6	
\$ 6 Toluene-d8 (Surr)	98	4.552	4.555	-0.003	92	403783	25.0	23.9	
\$ 7 4-Bromofluorobenzene (Surr)	95	6.751	6.748	0.003	94	153975	25.0	29.8	
10 Dichlorodifluoromethane	85	1.063	1.065	-0.002	99	253719	50.0	51.5	
11 Chloromethane	50	1.172	1.174	-0.002	99	222761	50.0	52.6	
12 Vinyl chloride	62	1.215	1.212	0.003	98	289377	50.0	59.4	
13 Butadiene	54	1.232	1.229	0.003	87	273786	50.0	63.1	
14 Bromomethane	96	1.379	1.381	-0.002	90	119050	50.0	33.8	
15 Chloroethane	64	1.428	1.430	-0.002	99	179349	50.0	57.9	
16 Dichlorofluoromethane	67	1.520	1.523	-0.003	97	422488	50.0	54.1	
17 Trichlorofluoromethane	101	1.553	1.555	-0.002	98	395887	50.0	48.5	
18 Ethanol	45	1.656	1.653	0.003	96	18781	2000.0	2414.6	
19 Ethyl ether	59	1.694	1.691	0.003	87	140461	50.0	51.2	
20 Acrolein	56	1.765	1.768	-0.003	98	42372	125.0	133.1	
21 1,1,2-Trichloro-1,2,2-trif	101	1.803	1.806	-0.003	94	247618	50.0	50.2	
22 1,1-Dichloroethene	96	1.809	1.811	-0.002	96	238655	50.0	52.6	
23 Acetone	58	1.841	1.844	-0.003	99	41044	250.0	254.6	
24 Iodomethane	142	1.896	1.898	-0.002	97	275299	50.0	42.6	
25 Isopropyl alcohol	45	1.912	1.909	0.003	100	44858	500.0	508.3	
26 Carbon disulfide	76	1.934	1.931	0.003	98	588476	50.0	49.2	
28 Acetonitrile	41	1.988	1.991	-0.003	76	392951	500.0	513.4	
29 3-Chloro-1-propene	76	1.988	1.991	-0.003	94	230029	NC	NC	
30 Methyl acetate	43	1.999	2.002	-0.003	96	345249	250.0	227.5	
31 Methylene Chloride	84	2.059	2.056	0.003	85	237792	50.0	53.9	
32 2-Methyl-2-propanol	59	2.114	2.116	-0.002	99	74336	500.0	476.1	
33 Acrylonitrile	53	2.184	2.187	-0.003	100	362807	500.0	486.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Methyl tert-butyl ether	73	2.195	2.198	-0.003	95	428095	50.0	47.1	
34 trans-1,2-Dichloroethene	61	2.195	2.198	-0.003	97	309092	50.0	51.3	
36 Hexane	57	2.331	2.334	-0.003	88	354361	50.0	56.2	
37 1,1-Dichloroethane	63	2.424	2.421	0.003	95	408182	50.0	50.2	
39 Vinyl acetate	43	2.446	2.448	-0.002	97	701129	100.0	92.5	
38 Isopropyl ether	45	2.451	2.454	-0.003	93	583462	50.0	49.3	
40 2-Chloro-1,3-butadiene	53	2.473	2.470	0.003	89	348286	50.0	51.4	
41 Tert-butyl ethyl ether	59	2.652	2.655	-0.003	97	526768	50.0	48.3	
42 cis-1,2-Dichloroethene	61	2.745	2.747	-0.002	79	343580	50.0	47.7	
43 2,2-Dichloropropane	77	2.745	2.747	-0.002	73	340429	50.0	48.4	
44 2-Butanone (MEK)	72	2.761	2.764	-0.003	98	59438	250.0	234.2	
45 Ethyl acetate	43	2.789	2.786	0.003	98	162025	100.0	84.6	
46 Propionitrile	54	2.799	2.802	-0.003	99	129264	500.0	473.4	
47 Methacrylonitrile	41	2.881	2.884	-0.003	90	545223	500.0	441.5	
48 Chlorobromomethane	130	2.887	2.889	-0.003	81	134639	50.0	45.1	
50 Chloroform	83	2.925	2.927	-0.002	91	400795	50.0	48.7	
49 Tetrahydrofuran	42	2.930	2.927	0.003	72	48692	100.0	84.7	
51 1,1,1-Trichloroethane	97	3.044	3.041	0.003	97	363096	50.0	46.4	
53 Cyclohexane	56	3.077	3.074	0.003	92	441905	50.0	55.8	
55 Carbon tetrachloride	117	3.142	3.145	-0.003	91	323449	50.0	46.7	
54 1,1-Dichloropropene	75	3.142	3.145	-0.003	97	337287	50.0	50.7	
56 Isobutyl alcohol	43	3.224	3.221	0.003	96	75169	1250.0	1120.6	
57 Benzene	78	3.273	3.275	-0.002	95	989728	50.0	50.3	
58 t-Amyl alcohol	59	3.284	3.281	0.003	75	57234	500.0	418.4	
59 1,2-Dichloroethane	62	3.284	3.286	-0.002	97	222350	50.0	43.1	
60 Tert-amyl methyl ether	73	3.344	3.341	0.003	97	451649	50.0	46.6	
61 n-Heptane	43	3.425	3.422	0.003	88	279655	50.0	50.7	
62 n-Butanol	56	3.665	3.662	0.003	87	53639	1250.0	1187.4	
63 Trichloroethene	130	3.687	3.689	-0.002	97	272892	50.0	47.5	
64 Ethyl acrylate	55	3.763	3.765	-0.002	98	121645	50.0	48.5	
65 Methylcyclohexane	83	3.812	3.814	-0.002	86	472707	50.0	53.2	
66 1,2-Dichloropropane	63	3.845	3.842	0.003	96	217114	50.0	48.4	
68 Dibromomethane	93	3.926	3.923	0.003	93	97608	50.0	44.0	
67 Methyl methacrylate	41	3.921	3.923	-0.002	87	179239	100.0	92.1	
69 1,4-Dioxane	88	3.953	3.956	-0.003	92	17205	1000.0	1002.4	
71 Dichlorobromomethane	83	4.030	4.027	0.003	99	276306	50.0	46.9	
72 2-Nitropropane	43	4.198	4.201	-0.003	98	51516	100.0	89.8	
74 cis-1,3-Dichloropropene	75	4.351	4.353	-0.002	98	327360	50.0	47.3	
75 4-Methyl-2-pentanone (MIBK)	58	4.476	4.478	-0.002	93	185583	250.0	225.7	
76 Toluene	91	4.601	4.604	-0.003	98	1053333	50.0	45.5	
77 trans-1,3-Dichloropropene	75	4.775	4.772	0.003	90	245224	50.0	46.3	
78 Ethyl methacrylate	69	4.852	4.854	-0.002	87	178342	50.0	45.4	
79 1,1,2-Trichloroethane	97	4.917	4.919	-0.002	89	144407	50.0	42.7	
80 Tetrachloroethene	166	5.026	5.028	-0.002	97	279369	50.0	43.0	
81 1,3-Dichloropropane	76	5.053	5.050	0.003	86	266142	50.0	47.5	
82 2-Hexanone	58	5.129	5.132	-0.003	92	184136	250.0	277.2	
83 Chlorodibromomethane	127	5.233	5.230	0.003	89	150052	50.0	51.8	
84 n-Butyl acetate	43	5.238	5.235	0.003	96	133939	50.0	54.4	
85 Ethylene Dibromide	107	5.331	5.328	0.003	99	151424	50.0	49.9	
86 1-Chlorohexane	91	5.717	5.720	-0.003	92	394948	50.0	57.7	
87 Chlorobenzene	112	5.739	5.736	0.003	97	739189	50.0	50.4	
88 1,1,1,2-Tetrachloroethane	131	5.804	5.807	-0.003	96	250871	50.0	51.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
89 Ethylbenzene	91	5.831	5.828	0.003	97	1374744	50.0	59.4	
90 m-Xylene & p-Xylene	91	5.935	5.932	0.003	0	1034621	50.0	57.1	
91 o-Xylene	91	6.278	6.280	-0.002	96	1043318	50.0	58.0	
92 Styrene	104	6.294	6.297	-0.003	94	799381	50.0	55.9	
93 Bromoform	173	6.457	6.454	0.003	99	97561	50.0	49.2	
94 Isopropylbenzene	105	6.610	6.612	-0.002	95	1318099	50.0	58.4	
95 Cyclohexanone	55	6.708	6.705	0.003	90	25688	500.0	381.1	
96 Bromobenzene	77	6.877	6.879	-0.002	90	374169	50.0	54.6	
97 1,1,2,2-Tetrachloroethane	83	6.893	6.890	0.003	93	151884	50.0	52.3	
98 1,2,3-Trichloropropane	110	6.926	6.928	-0.002	80	47035	50.0	51.6	
99 trans-1,4-Dichloro-2-butene	53	6.953	6.950	0.003	84	31593	50.0	50.3	
100 N-Propylbenzene	91	6.985	6.988	-0.003	98	1530795	50.0	64.7	
101 2-Chlorotoluene	91	7.062	7.059	0.003	97	847562	50.0	57.8	
102 1,3,5-Trimethylbenzene	105	7.160	7.157	0.003	95	1046327	50.0	60.3	
103 4-Chlorotoluene	91	7.160	7.162	-0.002	98	972265	50.0	57.6	
104 tert-Butylbenzene	119	7.454	7.456	-0.002	91	892006	50.0	59.4	
106 1,2,4-Trimethylbenzene	105	7.503	7.505	-0.002	96	1201013	50.0	69.0	
107 sec-Butylbenzene	105	7.660	7.663	-0.003	94	1329411	50.0	61.1	
108 1,3-Dichlorobenzene	146	7.758	7.755	0.003	98	541902	50.0	54.0	
109 4-Isopropyltoluene	119	7.807	7.804	0.003	96	1128761	50.0	58.5	
110 1,4-Dichlorobenzene	146	7.846	7.843	0.003	96	552504	50.0	50.9	
111 1,2,3-Trimethylbenzene	105	7.900	7.897	0.003	98	1009843	50.0	57.4	
112 Benzyl chloride	91	7.982	7.984	-0.002	98	265512	50.0	44.9	
113 1,2-Dichlorobenzene	146	8.194	8.191	0.003	97	473399	50.0	51.9	
114 n-Butylbenzene	91	8.199	8.196	0.003	97	958091	50.0	62.7	
115 1,2-Dibromo-3-Chloropropan	157	8.951	8.953	-0.002	94	27882	50.0	52.8	
116 1,3,5-Trichlorobenzene	180	9.152	9.149	0.003	98	361415	50.0	54.1	
117 1,2,4-Trichlorobenzene	180	9.778	9.780	-0.002	94	278330	50.0	54.2	
118 Hexachlorobutadiene	225	9.979	9.976	0.003	97	138797	50.0	50.7	
119 Naphthalene	128	10.056	10.053	0.003	96	487974	50.0	57.2	
120 1,2,3-Trichlorobenzene	180	10.355	10.352	0.003	96	211126	50.0	52.4	
S 137 1,2-Dichloroethene, Total	1				0		100.0	99.0	
S 138 Trihalomethanes, Total	1				0		200.0	196.6	
S 134 Xylenes, Total	1				0		100.0	115.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	93.6	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

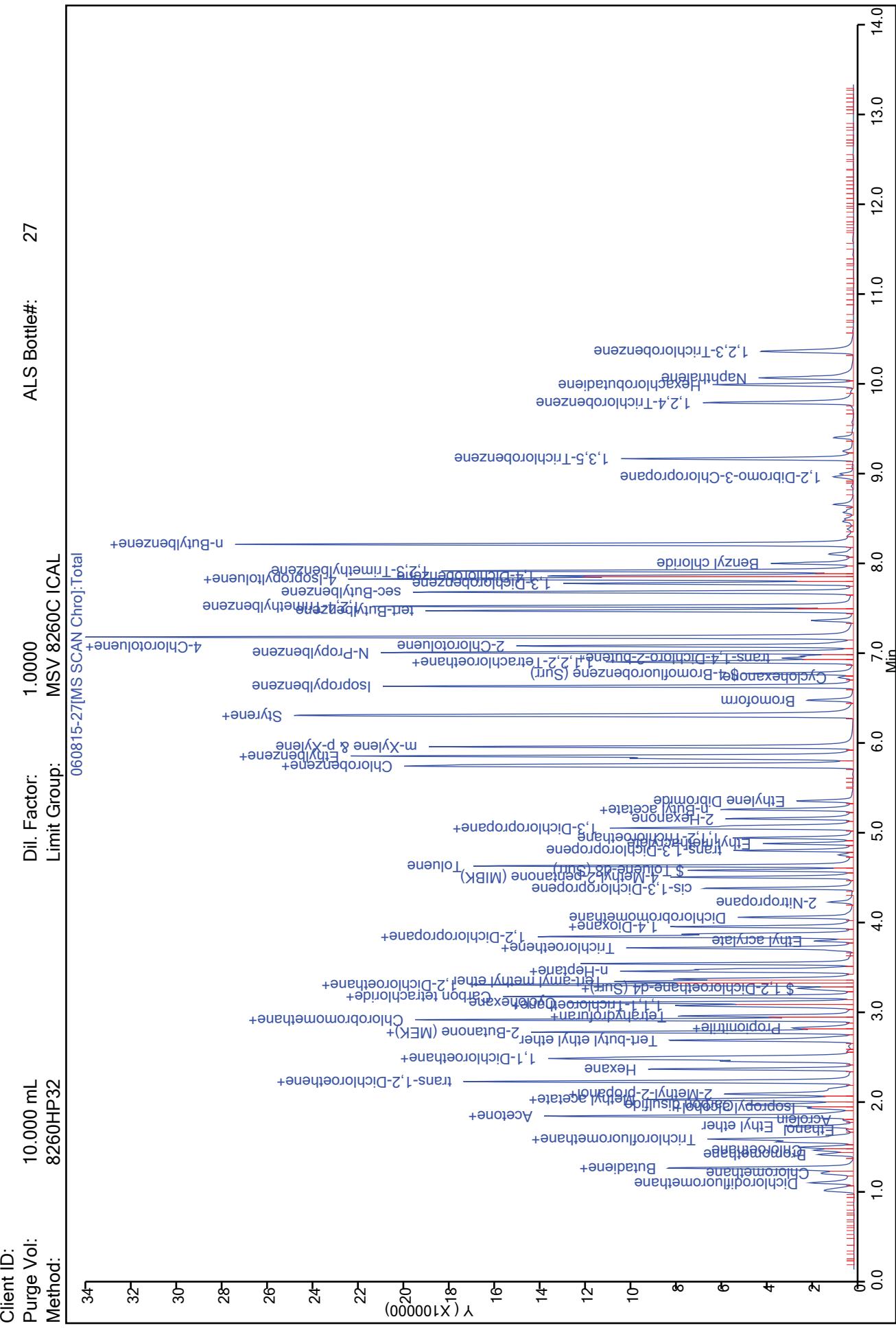
**Reagents:**

V1_Mega_I_00037	Amount Added: 21.50	Units: uL	
V1_gases_I_00108	Amount Added: 21.50	Units: uL	
VOA_ISSS_50_W_00026	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Jun-2015 11:51:46

Chrom Revision: 2.2 14-May-2015 11:41:56

Data File: \\ChromNA\\Nashville\\ChromData\\HP32\\20150608-56175.b\\060815-27.D  
Injection Date: 08-Jun-2015 22:21:30  
Lims ID: 490-79558-C-2 MSD  
Instrument ID: HP32  
TestAmerica Nashville



## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica NashvilleJob No.: 490-79645-1

SDG No.:

Instrument ID: HP32Start Date: 05/18/2015 17:09Analysis Batch Number: 249241End Date: 05/18/2015 22:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 490-249241/1		05/18/2015 17:09	1	051815-17.D	DB-624 0.18 (mm)
STD0005 490-249241/2 IC		05/18/2015 17:36	1	051815-18.D	DB-624 0.18 (mm)
STD001 490-249241/3 IC		05/18/2015 18:03	1	051815-19.D	DB-624 0.18 (mm)
STD002 490-249241/4 IC		05/18/2015 18:30	1	051815-20.D	DB-624 0.18 (mm)
STD010 490-249241/5 IC		05/18/2015 18:57	1	051815-21.D	DB-624 0.18 (mm)
STD020 490-249241/6 IC		05/18/2015 19:24	1	051815-22.D	DB-624 0.18 (mm)
ICIS 490-249241/7		05/18/2015 19:52	1	051815-23.D	DB-624 0.18 (mm)
STD100 490-249241/8 IC		05/18/2015 20:19	1	051815-24.D	DB-624 0.18 (mm)
STD200 490-249241/9 IC		05/18/2015 20:46	1	051815-25.D	DB-624 0.18 (mm)
ICV 490-249241/12		05/18/2015 22:07	1	051815-28.D	DB-624 0.18 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Nashville

Job No.: 490-79645-1

SDG No.:

Instrument ID: HP32

Start Date: 06/05/2015 10:51

Analysis Batch Number: 253850

End Date: 06/05/2015 23:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 490-253850/1		06/05/2015 10:51	1	060515-01.D	DB-624 0.18 (mm)
CCVIS 490-253850/2		06/05/2015 11:19	1	060515-02.D	DB-624 0.18 (mm)
LCS 490-253850/3		06/05/2015 11:48	1	060515-03.D	DB-624 0.18 (mm)
LCSD 490-253850/4		06/05/2015 12:16	1	060515-04.D	DB-624 0.18 (mm)
MB 490-253850/7		06/05/2015 13:41	1	060515-07.D	DB-624 0.18 (mm)
490-79781-10	Trip Blank	06/05/2015 15:35	1	060515-11.D	DB-624 0.18 (mm)
490-79781-1	SC-01-060215	06/05/2015 16:04	1	060515-12.D	DB-624 0.18 (mm)
490-79781-2	PMP-Pond-060215	06/05/2015 17:57	1	060515-16.D	DB-624 0.18 (mm)
490-79781-3	RW-6-060215	06/05/2015 18:25	1	060515-17.D	DB-624 0.18 (mm)
490-79781-4	PMP-50-060215	06/05/2015 18:53	1	060515-18.D	DB-624 0.18 (mm)
490-79781-5	PAB-00-060215	06/05/2015 19:21	1	060515-19.D	DB-624 0.18 (mm)
490-79781-6	PAB-01-060215	06/05/2015 19:49	1	060515-20.D	DB-624 0.18 (mm)
490-79781-7	PAB-02-060215	06/05/2015 20:18	1	060515-21.D	DB-624 0.18 (mm)
490-79781-8	PMP-180-060315	06/05/2015 20:46	1	060515-22.D	DB-624 0.18 (mm)
490-79781-9	PMP-230-060315	06/05/2015 21:15	1	060515-23.D	DB-624 0.18 (mm)
490-79781-1 MS	SC-01-060215 MS	06/05/2015 22:38	1	060515-26.D	DB-624 0.18 (mm)
490-79781-1 MSD	SC-01-060215 MSD	06/05/2015 23:07	1	060515-27.D	DB-624 0.18 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica NashvilleJob No.: 490-79645-1

SDG No.:

Instrument ID: HP32Start Date: 06/05/2015 23:35Analysis Batch Number: 254074End Date: 06/08/2015 12:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 490-254074/1		06/05/2015 23:35	1	060515-28.D	DB-624 0.18 (mm)
CCVIS 490-254074/2		06/06/2015 00:03	1	060515-29.D	DB-624 0.18 (mm)
LCS 490-254074/3		06/06/2015 00:31	1	060515-30.D	DB-624 0.18 (mm)
LCSD 490-254074/4		06/06/2015 00:59	1	060515-31.D	DB-624 0.18 (mm)
MB 490-254074/7		06/06/2015 02:23	1	060515-34.D	DB-624 0.18 (mm)
490-79645-9	Trip Blank	06/06/2015 03:19	1	060515-36.D	DB-624 0.18 (mm)
490-79645-1	OB-20A-060115	06/06/2015 03:47	1	060515-37.D	DB-624 0.18 (mm)
490-79645-2	FB-01-060115	06/06/2015 06:07	1	060515-42.D	DB-624 0.18 (mm)
490-79645-3	OB-20B-060115	06/06/2015 06:35	1	060515-43.D	DB-624 0.18 (mm)
490-79645-4	DUP-01-060115	06/06/2015 07:03	1	060515-44.D	DB-624 0.18 (mm)
490-79645-5	OB-27-060115	06/06/2015 07:30	1	060515-45.D	DB-624 0.18 (mm)
490-79645-6	OB-11R-060115	06/06/2015 07:58	1	060515-46.D	DB-624 0.18 (mm)
BFB 490-254074/28		06/08/2015 10:28	1		DB-624 0.18 (mm)
490-79645-1 MS	OB-20A-060115 MS	06/08/2015 12:18	1	060815-05.D	DB-624 0.18 (mm)
490-79645-1 MSD	OB-20A-060115 MSD	06/08/2015 12:46	1	060815-06.D	DB-624 0.18 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Nashville Job No.: 490-79645-1

SDG No.: \_\_\_\_\_

Instrument ID: HP32 Start Date: 06/08/2015 10:28Analysis Batch Number: 254379 End Date: 06/08/2015 22:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 490-254379/1		06/08/2015 10:28	1	060815-01.D	DB-624 0.18 (mm)
CCVIS 490-254379/2		06/08/2015 10:56	1	060815-02.D	DB-624 0.18 (mm)
LCS 490-254379/3		06/08/2015 11:23	1	060815-03.D	DB-624 0.18 (mm)
LCSD 490-254379/4		06/08/2015 11:51	1	060815-04.D	DB-624 0.18 (mm)
MB 490-254379/7		06/08/2015 14:08	1	060815-09.D	DB-624 0.18 (mm)
ZZZZZ		06/08/2015 16:25	1		DB-624 0.18 (mm)
490-79781-10	Trip Blank	06/08/2015 18:42	1	060815-19.D	DB-624 0.18 (mm)
490-79645-7	SR-3-SEEP-060115	06/08/2015 19:37	1	060815-21.D	DB-624 0.18 (mm)
490-79645-8	RW-6A-060115	06/08/2015 20:05	1	060815-22.D	DB-624 0.18 (mm)
490-79558-B-2 MS		06/08/2015 21:54	1	060815-26.D	DB-624 0.18 (mm)
490-79558-C-2 MSD		06/08/2015 22:21	1	060815-27.D	DB-624 0.18 (mm)

# **Shipping and Receiving Documents**



490-79645 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 6/3/2015 @ 08401. Tracking # 0137 (last 4 digits, FedEx)Courier: FedEx IR Gun ID 120801422. Temperature of rep. sample or temp blank when opened: 10 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES  NO  NA4. Were custody seals on outside of cooler? YES  NO  NA

If yes, how many and where: \_\_\_\_\_

5. Were the seals intact, signed, and dated correctly? YES  NO  NA6. Were custody papers inside cooler? YES  NO  NAI certify that I opened the cooler and answered questions 1-6 (initial) DA7. Were custody seals on containers: YES  NO  and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES  NO  NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) MJM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) MJM

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) MJMI certify that I attached a label with the unique LIMS number to each container (initial) MJM

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..# \_\_\_\_\_

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## **CHAIN OF CUSTODY / ANALYSIS REQUEST**

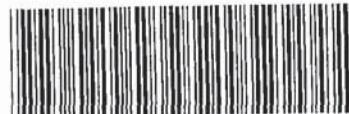
Loc: 490  
**7964**  
77 New Durham Road  
Edison, New Jersey 08817  
Phone: (732) 549-3900 Fax: (732) 549-3

Special Instructions

Relinquished by	Company	Date / Time	Received by	Company
Andrew Valenski	Cornerstone	6/1/15   4:33	1) <i>Jeanne Thorne</i>	Company
Relinquished by	Company	Date / Time	Received by	Company
2) <i>Jeanne Thorne</i>	<i>John J. Bohner</i>	6/2/15   0800	2) <i>Jeanne Thorne</i>	Company
Relinquished by	Company	Date / Time	Received by	Company
3) <i>Jeanne Thorne</i>	<i>Jeff Amavia</i>	6/2/15   1800	3) <i>Jeff Amavia</i>	TAN
Relinquished by	Company	Date / Time	Received by	Company
				4)

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0814)

## COOLER RECEIPT FORM



490-79781 Chain of Custody

Cooler Received/Opened On 6/4/2015 @ 0840

1. Tracking # 0159 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES  NO  NA

4. Were custody seals on outside of cooler?

YES  NO  NA

If yes, how many and where: \_\_\_\_\_

5. Were the seals intact, signed, and dated correctly?  YES  NO  NA

6. Were custody papers inside cooler?

YES  NO  NA

I certify that I opened the cooler and answered questions 1-6 (initial) DA

7. Were custody seals on containers: YES  NO  and Intact YES...NO...NA

Were these signed and dated correctly?  YES  NO  NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?  YES  NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?  YES  NO...NA

12. Did all container labels and tags agree with custody papers?  YES  NO...NA

13a. Were VOA vials received?

YES  NO  NA

b. Was there any observable headspace present in any VOA vial?  YES  NO  NA

14. Was there a Trip Blank in this cooler?  YES  NO...NA If multiple coolers, sequence # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used  YES  NO...NA

16. Was residual chlorine present?  YES  NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)?  YES  NO...NA

18. Did you sign the custody papers in the appropriate place?  YES  NO...NA

19. Were correct containers used for the analysis requested?  YES  NO...NA

20. Was sufficient amount of sample sent in each container?  YES  NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES... NO Was a NCM generated? YES... NO...# \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## CHAIN OF CUSTODY / ANALYSIS REQUEST

Loc: 490  
79781  
Page 1 of 1

Name ( for report and invoice )  
Tina Rooper

Company Cornerstone Environmental

Address 100 Crystal Run Rd, Suite 101  
City Middletown State NY

Phone 845-695-0200 Fax 845-692-5895

Samplers Name (Printed)  
Andrew Valenski

P. O. #

Site/Project Identification  
Ringswood / EZo336

State (Location of site): NJ:  NY:  Other:

Regulatory Program:

ANALYSIS REQUESTED (ENTER PX BELOW TO INDICATE REQUEST)

LAB USE ONLY  
Project No:

Job No:

Sample  
Numbers

Analysis Turnaround Time

Standard   
Rush Charges Authorized For:  
2 Week   
1 Week   
Other  5 day

No. of Cont.

Date Time Matrix

Sample Identification

1 SC-01-060215 6/2/15 9:45 AM 3 X

2 PMP-Pond-060215 6/2/15 9:00 SW 3 X

3 RW-6-060215 6/2/15 10:50 GW 3 X

4 PMP-50-060215 6/2/15 13:05 GW 3 X

5 PAB-01-060215 6/2/15 15:45 SW 3 X

6 PAB-01-060215 6/2/15 16:10 SW 3 X

7 PAB-02-060215 6/2/15 16:20 SW 3 X

8 PMP-180-060315 6/3/15 9:30 GW 3 X

9 PMP-230-060315 6/3/15 10:45 GW 3 X

Preservation Used: 1 = ICE, 2 = HCl, 3 = H<sub>2</sub>SO<sub>4</sub>, 4 = HNO<sub>3</sub>, 5 = NaOH  
6 = Other \_\_\_\_\_, 7 = Other \_\_\_\_\_

Soil: \_\_\_\_\_  
Water: \_\_\_\_\_

Water Metals Filtered (Yes/No)? \_\_\_\_\_

Company Corrystone E.G.

Date / Time 6/3/15 12:30

Received by J. M. His

Company TestAmerica Edison

Date / Time 6/3/15 1:35P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 1:50P

Received by J. M. His

Company TestAmerica Edison

Date / Time 6/3/15 2:00P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 2:15P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 2:30P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 2:45P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 3:00P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 3:15P

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Company TestAmerica Edison

Date / Time 6/3/15 3:30P

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Date / Time 6/3/15 3:45P

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Date / Time 6/3/15 4:00P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 4:15P

Received by S. S.

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Date / Time 6/3/15 4:30P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 4:45P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 5:00P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 5:15P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 5:30P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 5:45P

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Company TestAmerica Edison

Date / Time 6/3/15 6:00P

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Company TestAmerica Edison

Date / Time 6/3/15 6:15P

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Company TestAmerica Edison

Date / Time 6/3/15 6:30P

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Company TestAmerica Edison

Date / Time 6/3/15 6:45P

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Company TestAmerica Edison

Date / Time 6/3/15 7:00P

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Date / Time 6/3/15 7:30P

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Date / Time 6/3/15 7:45P

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Date / Time 6/3/15 8:00P

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Company TestAmerica Edison

Date / Time 6/3/15 8:30P

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Date / Time 6/3/15 8:45P

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Company TestAmerica Edison

Date / Time 6/3/15 9:00P

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Company TestAmerica Edison

Date / Time 6/3/15 9:15P

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Date / Time 6/3/15 9:45P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 10:00P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 10:15P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 10:30P

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 10:45P

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Company TestAmerica Edison

Date / Time 6/3/15 10:55P

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Date / Time 6/3/15 11:10P

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Date / Time 6/3/15 5:10A

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Company TestAmerica Edison

Date / Time 6/3/15 5:40A

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 5:55A

Received by S. S.

Company TestAmerica Edison

Date / Time 6/3/15 6:10A

## Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Login Number: 79645**

**List Source: TestAmerica Nashville**

**List Number: 1**

**Creator: McBride, Mike**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Cornerstone Environmental Group, LLC

Job Number: 490-79645-1

**Login Number: 79781**

**List Source: TestAmerica Nashville**

**List Number: 1**

**Creator: Armstrong, Daniel**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



E-Mail Date: 2015-06-19  
E-Mail To: tim.roeper@cornerstoneeg.com  
cc:

U.S. Mail: Tim Roeper  
Cornerstone Environmental Group  
100 Crystal Run Road, Suite 101  
Middletown, NY 10941

**ANALYTICAL DATA VALIDATION REPORT**  
Ringwood Mines/Landfill  
Ford Motor Company  
**PROJECT** not available  
**CADENA PROJECT E203361**  
**SAMPLES COLLECTED** June 2015  
**SUBMITTAL #:** 79645-1

**PREPARED BY:**  
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Date: 2015-06-19  
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APPENDIX 5	SAMPLE HOLDING TIME AND PRESERVATION REQUIREMENTS

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ATTACHMENT A	CHAIN OF CUSTODY DOCUMENT(S)
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## **1.0 INTRODUCTION**

The following document details an assessment of the analytical data reported by Accutest-Dayton New Jersey Laboratory the data in the submittals listed below which were collected from the Ringwood Mines/Landfill site as noted. A sampling and analysis summary that lists all sample ID's and testing as related to the laboratory submittal numbers is presented in Appendix 1. A summary of all of the analytical data is presented in Appendix 3. Copies of sample Chain of Custody (COC) documents and cooler receipt forms for samples discussed in this report are included in Attachment A.

***Table 1.1***

<b><i>Laboratory Submittal</i></b>	<b><i>Sample Date</i></b>	<b><i>Laboratory Receipt Date</i></b>
490-79645-1	6/01-02-03/2015	6/01-02-03/2015

The samples noted below were validated against the associated method/parameter in order to achieve the validation requirements for this SDG:

***Table 1.2***

<b><i>Parameter</i></b>	<b><i>Reference Method</i></b>	<b><i>Samples or Analytes Validated</i></b>
Volatile Organics	OSW-8260C	TCL List OLM4.2 plus TIC's

All "SW" analytical methods were referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", Third Edition, November 1986 (with all subsequent revisions). The "SM" analytical method was referenced from the "Standard Methods for the Examination of Water and Waste water", latest promulgated revision. "EPA" methods were referenced from the revisions noted.

Laboratory Standard Operating Procedures (SOPs) associated with the methods utilized for this laboratory submittal were not available to CADENA for the purpose of validating this SDG.

Level IV data review provides a comprehensive or extensive review of the analytical data allowing for the complete reconstruction of the chemical analysis. A Level IV (Tier 3) data review was performed on the samples listed in Table 1.2 above by (CADENA).

All of the data that was recalculated was consistent with the reported results to within at least 2 significant figures. Final results may not recalculate exactly beyond this level of precision, in some cases, due to differences in available significant figures between the hardcopy raw data provided and the data utilized for calculations by the laboratory that came directly from the instrument. A table of the laboratory documents reviewed in preparing this report is included in Appendix 2.

The data was reviewed in accordance with the analytical methods and the documents listed below: (NOTE: laboratory criteria – control limits – were utilized to evaluate the data where available. Comparison to NFG criteria are noted when lab criteria was not available or for informational purposes when lab data exceeds NFG criteria).

- i.) "Standard Operating Procedure HW-6 Rev12 March 2001: CLP Organics Data Review and Preliminary Review" USEPA Region 2 as identified in project QAPP.
- ii.) "Standard Operating Procedure HW-2, Rev11, Jan 1992: Evaluation of Metals Data for the CLP Program" as identified in the project QAPP.

The Level VI review findings are presented in the following subsections.

An overview of the review findings is presented in table format. Several data qualifier flags were utilized in the review process. The definitions of these qualifier flags are as follows:

- J Indicates an estimated value.
- U Indicates the compound or analyte was analyzed for, but not detected at or above the stated limit.
- UJ The analyte/compound was not detected above the reported sample quantitation limit. However, the quantitation limit is considered to be approximate due to associated quality assurance results.
- UB The analyte was detected in the sample at a level between the MDL and RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the reporting limit.
- B The analyte was detected in the sample at a level above the RDL. For organics the sample concentration for common lab contaminates was less than 10 times the blank concentration or 5 times for other organic compounds and for inorganics the sample concentration was less than 10 times the blank concentration. The sample result should be considered non-detect at the concentration reported.
- R The analyte/compound results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte/compound cannot be verified.

All flags have been incorporated into the data tables in this report.

## **1.1 VALIDATION QUALIFIER EXECUTIVE SUMMARY**

### **VALIDATION SUMMARY**

#### **GCMS VOC**

Client sample 79781-1 n-butylbenzene result was qualified as estimated with a J flag due to associated Continuing Calibration Verification (CCV) response outlier biased high. This result was obtained using the instrument TIC functionality but was supported by an initial and continuing calibration.

#### **GCMS VOC**

Several results that were treated as identified by the lab as TIC values were qualified in the original level 2 verification review as TIC results with NJ flags were treated as calibration supported non-TIC results based on this level 4 supporting data package so were qualified using TAL criteria if applicable rather than defaulting to NJ flagging.

The following observations **DID NOT** result in qualification but were noted during the validation review:

#### **GC/MS VOC**

Certificates of analysis and prep logs for standards and all working/primary standard concentrations that are required to verify calibration standard concentrations and spike levels were not available in the laboratory data package for review.

Sample pH or chlorine checks were not supported by the raw data (benchsheets for pH checks not available in level 4 data package).

Trip blanks for both submittals were not referenced on the associated COC's.

### **VERIFICATION SUMMARY**

The following qualifications and associated data flags were applied based on the initial level 2 review of this data package.

GCMS VOC client sample 79781-1 MS/MSD RPD only was an outlier for bromomethane. Qualification of client sample results was not required based on this QC outlier alone.

GCMS VOC trip blank for submittal 79781-1 had a detection below the RL for acetone. Client sample 79645-7 acetone results should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS VOC trip blank for submittal 79645-1 was non-detect for all target analytes. Note: TIC detections in the trip blank were not used to qualify client sample results.

GCMS VOC QC batch 254379 MS recovery outliers were not determined using a sample from this submittal so qualification of client sample results was not required based on this sample-specific QC outlier.

DKQP specific non-conformances as noted in laboratory submittal case narrative:

Reporting limits were elevated for carbon disulfide, 1,2-dibromo-3-chloropropane, methyl acetate and methylene chloride.

The following TAL SOMO1.2 analytes were not included in the client target analyte list: 1,4-dioxane, 1,2,3-trichlorobenzene, o-xylene and p&m-xylene (total xylenes was reported).

## **2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD SW846 8260C**

The target analyte list was defined by the client-project as TCL List OLM4.2.

### **2.1 CALIBRATION – GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) VOCs**

#### **2.1.1 TUNING AND MASS CALIBRATION – GC/MS VOCs**

Tuning compounds (Bromofluorobenzene or BFB) were analyzed at the required frequency and met the tuning criteria specified in the method without exception.

#### **2.1.2 INITIAL CALIBRATION – GC/MS VOCs**

Initial calibration data for VOCs were reviewed and met the criteria for instrument sensitivity and linearity of response without exception.

#### **2.1.3 INITIAL CALIBRATION VERIFICATION – GC/MS VOCs**

Initial calibration verification (ICV) standards for VOC analyses were reviewed and met criteria specified by the laboratory with no exceptions.

### **2.2 CONTINUING CALIBRATION – GC/MS VOCs**

Continuing calibration standards were analyzed at the required frequency and the results met the criteria for instrument sensitivity and linearity of response with the following exceptions:

*Client sample 79781-1 n-butylbenzene result was qualified as estimated with a J flag due to associated Continuing Calibration Verification (CCV) response outlier biased high. This result was obtained using the instrument TIC functionality but was supported by an initial and continuing calibration. Remaining CCV response outliers were not associated with reported target analyte list compounds.*

### **2.3 INTERNAL STANDARDS – GC/MS VOCs**

Internal standard (IS) data were reviewed and met criteria without exception.

### **2.4 SURROGATE SPIKE RECOVERIES – GC/MS VOCs**

If surrogate recoveries are outside of established control limits, presumably due to matrix effects, these interferences must be confirmed by sample re-analysis or other acceptable standard techniques.

If in order to overcome sample matrix interferences or to quantitate elevated target compound levels for an investigative sample, the surrogate results are diluted to below the laboratories limits of quantitation, these surrogate results will not be utilized to qualify data.

All surrogate recoveries were within the established laboratory control limits without exception.

## 2.5 LABORATORY CONTROL SAMPLE ANALYSES - GC/MS VOCs

A laboratory control sample (LCS) was prepared and analyzed for VOCs. The LCS recoveries were within the laboratory control limits for all compounds of interest without exception.

## 2.6 MATRIX SPIKE/MATRIX-SPIKE-DUPLICATE ANALYSES - GC/MS VOCs

GCMS VOC QC batch 254379 MS recovery outliers were not determined using a sample from this submittal so qualification of client sample results was not required based on this sample-specific QC outlier.

GCMS VOC client sample 79781-1 MS/MSD RPD only was an outlier for bromomethane. Qualification of client sample results was not required based on this QC outlier alone.

CADENA does not have enough information regarding the nature and consistency of the investigative field samples to apply the valid qualifiers to additional samples beyond the parent sample for the MS/MSD outlier. The end data user must determine whether or not to extend qualification based on knowledge of the investigative field samples and project requirements.

## 2.7 FIELD QA/QC – FIELD DUPLICATE ANALYSES - GC/MS VOCs

There were no field duplicate comparisons performed as part of this validation request.

## 2.8 TARGET COMPOUNDS AND REQUIRED LIMITS OF DETECTION - GC/MS VOCs

All target analytes were reported based on comparison to project-specific criteria. Potential non-conformances with project requirements are noted below:

DKQP specific non-conformances as noted in laboratory submittal case narrative:

Reporting limits were elevated for carbon disulfide, 1,2-dibromo-3-chloropropane, methyl acetate and methylene chloride.

The following TAL SOMO1.2 analytes were not included in the client target analyte list: 1,4-dioxane, 1,2,3-trichlorobenzene, o-xylene and p&m-xylene (total xylenes was reported).

## 2.9 COMPOUND IDENTIFICATION AND QUANTITATION - GC/MS VOCs

All laboratory target compound identifications and quantitation for the client samples reviewed were acceptable without exception.

## **2.10 TENTATIVELY IDENTIFIED COMPOUNDS - GC/MS VOCs**

TIC detections that are not supported by the calibration criteria available in the level 4 data package were qualified with NJ flags including the total alkane parameters. Detections made using the TIC approach that are supported by calibration and retention time data were qualified as target analytes using J flags for detections below the RL and no qualifiers for results above the RL that are supported with compliant batch and instrument QC.

## **2.11 BLANKS – METHOD/FIELD/CALIBRATION - GC/MS VOCs**

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit with the following exceptions:

GCMS VOC trip blank for submittal 79781-1 had a detection below the RL for acetone. Client sample 79645-7 acetone results should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS VOC trip blank for submittal 79645-1 was non-detect for all target analytes. Note: TIC detections in the trip blank were not used to qualify client sample results.

## **3.0 REPRESENTATIVENESS EVALUATION**

Representativeness is a qualitative evaluation of whether the data represents actual environmental conditions. Representativeness was evaluated using holding time criteria, which reflect the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

- i.) For those analyses that do not include a sample extraction, only one holding time was evaluated: the length of time between sample collection and analysis.
- ii.) For analyses that require sample extraction prior to analysis, two holding times were evaluated: the length of time from sampling until extraction and the length of time from extraction to analysis.

Holding times are compared to standard method specific holding times accepted or recommended by the United States Environmental Protection Agency (USEPA). Those holding times outside of USEPA acceptance criteria are qualitatively evaluated to determine their effect on sample representativeness.

Representativeness was also evaluated by analysis of laboratory method blanks and field equipment blanks. Laboratory method blanks and field equipment blanks are used to identify sources of contamination not associated with environmental conditions.

### **3.1 SAMPLE PRESERVATION AND HOLDING TIMES**

Sample holding time and preservation requirements are summarized in Appendix 5.

All sample extractions and/or analyses were performed within the specified holding times with no exceptions.

All samples were properly preserved and cooled to 0-6°C after collection.

### **3.2 METHOD BLANK SUMMARY**

The method blank results for samples from the SDG covered in this evaluation were all non-detect at the method detection limit with the following exceptions (refer to Appendix 4 for a summary of data qualifications). Also note that some of the blank detections reported below may not apply to the samples reviewed as part of this validation:

GCMS VOC trip blank for submittal 79781-1 had a detection below the RL for acetone. Client sample 79645-7 acetone results should be considered to be non-detect at the RL and qualified with a UB flag.

GCMS VOC trip blank for submittal 79645-1 was non-detect for all target analytes. Note: TIC detections in the trip blank were not used to qualify client sample results.

Evaluation of blank contamination includes directions on the interpretation of the affected analytical results.

### **4.0 USABILITY AND COMPARABILITY**

Usability of data was evaluated by assuring that all the analytical requests were met, samples were received in the proper condition, and all analyses were performed within the appropriate holding times.

No data evaluated within this delivery group was considered unusable (qualified with an R flag) due to sample integrity, sample matrix interference or batch quality control issues with no exceptions.

### **5.0 QC SUMMARY**

All sample results meet the project specific QAPP standard for usability with exceptions defined by validation and verification qualifiers as applied. Please reference the following tables for a summary of the investigative field sample data and their valid qualifiers based on Level 4 technical review of the analytical data.

## **APPENDIX 1**

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

Laboratory: TestAmerica-Nashville

Laboratory Submittal: 79645-1

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatiles
490796451	OB-20A-060115	6/1/2015	10:50:00	X
490796452	FB-01-060115	6/1/2015	11:20:00	X
490796453	OB-20B-060115	6/1/2015	12:20:00	X
490796454	DUP-01-060115	6/1/2015	12:00:00	X
490796455	OB-27-060115	6/1/2015	1:45:00	X
490796456	OB-11R-060115	6/1/2015	2:55:00	X
490796457	SR-3-SEEP-060115	6/1/2015	2:05:00	X
490796458	RW-6A-060115	6/1/2015	3:50:00	X
490796459	Trip Blank	6/2/2015	12:01:00	X
490797811	SC-01-060215	6/2/2015	9:45:00	X
490797810	Trip Blank	6/2/2015	12:01:00	X
490797812	PMP-Pond-060215	6/2/2015	9:00:00	X
490797813	RW-6-060215	6/2/2015	10:50:00	X
490797814	PMP-50-060215	6/2/2015	1:05:00	X
490797815	PAB-00-060215	6/2/2015	3:45:00	X
490797816	PAB-01-060215	6/2/2015	4:10:00	X
490797817	PAB-02-060215	6/2/2015	4:20:00	X
490797818	PMP-180-060315	6/3/2015	9:30:00	X
490797819	PMP-230-060315	6/3/2015	10:45:00	X

## **APPENDIX 2**

**TABLE 2**  
**LABORATORY DOCUMENTS SUBMITTED FOR REVIEW**  
**FORD RINGWOOD MINES PROJECT**  
**NEW JERSEY FULL PACKAGE MINI FINAL REPORT**  
**E203361 79645-1 and 79781-1**  
**JUNE 2015**

<b>Description</b>
Cover Title Page
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Check Sample duplicate recoveries (form III)
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Form I and Form I TIC's
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Total Ion Profile Chromatogram
Ion profiles of detected target analyte peaks
TIC reports and ion profiles
Standards Data
Form VI
Internal Standard Curve Evaluation
Internal Standard Response and Concentration
ICAL Raw integration data from instrument
Manual Integration if applicable
Form VII - Continuing Calibration Data
ICV and CCAL Raw integration data from instrument
ICAL Internal standard and RT summary
Raw QC Data
Tune information
FORM 1 - Method Blank integration/internal standard and total ion profile raw data
FORM 1 - LCS and LCSDuplicate integration/internal standard and total ion profile raw data
FORM 1 - MS and MSDuplicate integration/internal standard and total ion profile raw data
Run logs
Shipping and Rec. Sample Control COC
COC forms
Cooler Receipt Form and narrative

### **APPENDIX 3**

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: TestAmerica - Nashville  
 Laboratory Submittal: 79645-1

Analyte	Sample Name: OB-20A-060115				FB-01-060115				OB-20B-060115				DUP-01-060115				OB-27-060115					
	Lab Sample ID: 490796451				490796452				490796453				490796454				490796455					
	Sample Date: 6/1/2015				6/1/2015				6/1/2015				6/1/2015				6/1/2015					
	Cas No.	Report	Valid	Result	Report	Valid	Result	Report	Valid	Report	Valid	Result	Report	Valid	Report	Valid	Report	Valid	Report	Valid		
GC/MS VOC																						
<u>OSW-8260C</u>																						
1,1,1-Trichloroethane	71-55-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,1,2-Tetrachloroethane	79-34-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,1,2-Trichloroethane	79-00-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,1-Dichloroethane	75-34-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.25	0.50	ug/l	
1,1-Dichloroethene	75-35-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,2,4-Trichlorobenzene	120-82-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,2,4-Trimethylbenzene - TIC	95-63-6																					
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
1,2-Dibromoethane	106-93-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,2-Dichlorobenzene	95-50-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,2-Dichloroethane	107-06-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.22	0.50	ug/l	
1,2-Dichloropropane	78-87-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,3,5-Trimethylbenzene - TIC	108-67-8																					
1,3-Dichlorobenzene	541-73-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,4-Dichlorobenzene	106-46-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
1,4-Dioxane - TIC	123-91-1																					
1H-Indene, 2,3-dihydro-1,6-dimethyl - TIC	TIC9																	5.0	---	ug/l	NJ	
1H-Indene, 2,3-dihydro-4,5,7-trimethyl - TIC	TIC5																					
1H-Indene, 2,3-dihydro-4,6-dimethyl - TIC	TIC8																	7.2	---	ug/l	NJ	
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC17																	7.9	---	ug/l	NJ	
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC6																					
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	
2-Butenal, (E) - TIC	123-73-9																					
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
2-Methyl-2-propanol - TIC	75-65-0																					
3-Phenylbut-1-ene - TIC	934-10-1																					
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.27	0.50	ug/l	J	0.27	0.50	ug/l	J	3.0	0.50	ug/l	---	
Benzene, (2-bromocyclopropyl) - TIC	TIC19																	5.9	---	ug/l	NJ	
Benzene, (2-bromocyclopropyl) - TIC	TIC3																					
Benzene, (3-methyl-2-butenyl) - TIC	TIC14																					
Benzene, (3-methyl-2-butenyl) - TIC	TIC4																					
Benzene, 1,1'-(1,5-hexadiene-1,6-diy)bi - TIC	TIC1																					
Benzene, 1,2,3,4-tetramethyl - TIC	488-23-3																	12	---	ug/l	NJ	
Benzene, 1,2,3,5-tetramethyl - TIC	527-53-7																					
Benzene, 1,2,3-trimethyl - TIC	526-73-8																					
Benzene, 1,2,4,5-tetramethyl - TIC	TIC18																					
Benzene, 1,2,4,5-tetramethyl - TIC	TIC2																					
Benzene, 1,2,4,5-tetramethyl - TIC	TIC5																					
Benzene, 1,2,4,5-tetramethyl - TIC	TIC7																					
Benzene, 1,2-diethyl - TIC	135-01-3																					
Benzene, 1-ethyl-4-ethyl - TIC	TIC13																	3.3	---	ug/l	NJ	
Benzene, 1-ethyl-4-ethyl - TIC	TIC2																	5.5	---	ug/l	NJ	
Benzene, 1-ethyl-2,4-dimethyl - TIC	874-41-9																					
Benzene, 1-methyl-2-(1-methylethyl) - TIC	TIC16																		10	---	ug/l	NJ
Benzene, 1-methyl-3-(1-methylethyl) - TIC	TIC4																		7.6	---	ug/l	NJ
Benzene, 1-methyl-4-propyl - TIC	TIC20																		21	---	ug/l	NJ
Benzene, 2-butenyl - TIC	TIC15																					
Benzene, 2-ethenyl-1,4-dimethyl - TIC	2039-89-6																					
Benzene, 4-ethyl-1,2-dimethyl - TIC	934-80-5																					
Bromoform	75-25-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Bromomethane	74-83-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Carbon disulfide	75-15-0	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Carbon tetrachloride	56-23-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Chlorobenzene	108-90-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Chlorodibromomethane	124-48-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Chloroethane	75-00-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.7	0.50	ug/l	---	1.9	0.50	ug/l	---	79	0.50	ug/l	---	
Chloroform	67-66-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Chloromethane	74-87-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
cis-1,2-Dichloroethene	156-59-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.30	0.50	ug/l	
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.96	1.0	ug/l	J	0.91	1.0	ug/l	J	1.6	1.0	ug/l	---	
Cyclopentane, methyl - TIC	96-37-7																					
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Dichlorofluoromethane	75-43-4																					
Ethyl ether - TIC	60-29-7																					
Ethylbenzene	100-41-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	
Freon																						

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: TestAmerica - Nashville  
 Laboratory Submittal: 79645-1

Analyte	Sample Name: OB-11R-060115				SR-3-SEEP-060115				RW-6A-060115				Trip Blank				SC-01-060215				
	Lab Sample ID: 490796456				490796457				490796458				490796459				490797811				
	Sample Date: 6/1/2015				6/1/2015				6/1/2015				6/2/2015				6/2/2015				
	Cas No.	Report	Valid	Result	Report	Valid	Result	Report	Valid	Report	Valid	Result	Report	Valid	Report	Valid	Report	Valid	Report	Valid	
<b>GC/MS VOC</b>																					
<b>OSW-8260C</b>																					
1,1,1-Trichloroethane	71-55-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1,2-Tetrachloroethane	79-34-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1-Dichloroethane	75-34-3	0.24	0.50	ug/l	J	ND	0.50	ug/l	---	0.28	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1-Dichloroethene	75-35-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2,4-Trimethylbenzene - TIC	95-63-6																	4.6	0.50	ug/l	---
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
1,2-Dibromoethane	106-93-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichloroethane	107-06-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichloropropane	78-87-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,3,5-Trimethylbenzene - TIC	108-67-8																	1.0	0.50	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.18	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,4-Dioxane - TIC	123-91-1																				
1H-Indene, 2,3-dihydro-1,6-dimethyl - TIC	TIC9																				
1H-Indene, 2,3-dihydro-4,5,7-trimethyl - TIC	TIC5	2.5	---	ug/l	NJ																
1H-Indene, 2,3-dihydro-4,6-dimethyl - TIC	TIC8																				
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC17																				
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC6	3.9	---	ug/l	NJ																
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Butenal, (E) - TIC	123-73-9																	55	---	ug/l	NJ
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Methyl-2-propanol - TIC	75-65-0																				
3-Phenylbut-1-ene - TIC	934-10-1																				
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	5.0	ug/l	---	4.5	5.0	ug/l	UB	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	2.9	0.50	ug/l	---	ND	0.50	ug/l	---	9.1	0.50	ug/l	---	ND	0.50	ug/l	---	1.6	0.50	ug/l	---
Benzene, (2-bromocyclopropyl) - TIC	TIC19																	4.1	---	ug/l	NJ
Benzene, (2-bromocyclopropyl) - TIC	TIC3																				
Benzene, (3-methyl-2-butenyl) - TIC	TIC14																				
Benzene, (3-methyl-2-butenyl) - TIC	TIC4	2.6	---	ug/l	NJ																
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi - TIC	TIC1																				
Benzene, 1,2,3,4-tetramethyl - TIC	488-23-3																	3.7	---	ug/l	NJ
Benzene, 1,2,3,5-tetramethyl - TIC	527-53-7	3.4	---	ug/l	NJ																
Benzene, 1,2,3-trimethyl - TIC	526-73-8																				
Benzene, 1,2,4,5-tetramethyl - TIC	TIC18																				
Benzene, 1,2,4,5,4-tetramethyl - TIC	TIC2																				
Benzene, 1,2,4,5,4-tetramethyl - TIC	TIC5																				
Benzene, 1,2,4,5-tetramethyl - TIC	TIC7																				
Benzene, 1,2-dienyl - TIC	135-01-3																				
Benzene, 1-ethenyl-4-ethyl - TIC	TIC13																				
Benzene, 1-ethenyl-4-ethyl - TIC	TIC2																				
Benzene, 1-ethyl-2,4-dimethyl - TIC	874-41-9																	5.7	---	ug/l	NJ
Benzene, 1-methyl-2-(1-methylethyl) - TIC	TIC16																				
Benzene, 1-methyl-3-(1-methylethyl) - TIC	TIC4																	2.9	---	ug/l	NJ
Benzene, 1-methyl-4-propyl - TIC	TIC20																				
Benzene, 2,4-dimethyl-1-(1-methylethyl) - TIC	TIC15	5.2	---	ug/l	NJ													6.5	---	ug/l	NJ
Benzene, 2-butenoil - TIC	TIC3																				
Benzene, 2-ethenyl-1,4-dimethyl - TIC	2039-89-6																				
Benzene, 4-ethyl-1,2-dimethyl - TIC	934-80-5																				
Bromoform	75-25-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Bromomethane	74-83-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Carbon disulfide	75-15-0	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Carbon tetrachloride	56-23-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chlorobenzene	108-90-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chlorodibromomethane	124-48-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chloroethane	75-00-3	22	0.50	ug/l	---	ND	0.50	ug/l	---	1.8	0.50	ug/l	---	ND	0.50	ug/l	---	1.1	0.50	ug/l	---
Chloroform	67-66-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chloromethane	74-87-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
cis-1,2-Dichloroethene	156-59-2	0.31	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Cyclohexane	110-82-7	1.9	1.0	ug/l	---	ND	1.0	ug/l	---	2.7	1.0	ug/l	---	ND	1.0	ug/l	---	1.7	1.0	ug/l	---
Cyclopentane, methyl - TIC	96-37-7	3.9	---	ug/l	NJ					8.1	---	ug/l	NJ					3.0	---	ug/l	NJ
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.70	0.50	ug/l	---
Dichlorofluoromethane - TIC	75-43-4																				
Ethyl ether - TIC	60-29-7																	0.76	0.50	ug/l	---
Ethylbenzene	100-11-4	ND	0.50	ug/l	---	ND	0.50	ug/l													

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: TestAmerica - Nashville  
 Laboratory Submittal: 79645-1

Analyte	Sample Name: Trip Blank				PMP-Pond-060215				RW-6-060215				PMP-50-060215				PAB-00-060215				
	Lab Sample ID: 4907978110				490797812				490797813				490797814				490797815				
	Sample Date: 6/2/2015				6/2/2015				6/2/2015				6/2/2015				6/2/2015				
	Cas No.	Report	Valid	Result	Report	Valid	Result	Report	Valid	Report	Valid	Result	Report	Valid	Report	Valid	Report	Valid	Report	Valid	
<u>GC/MS VOC</u>																					
<u>OSW-8260C</u>																					
1,1,1-Trichloroethane	71-55-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1,2-Tetrachloroethane	79-34-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1-Dichloroethane	75-34-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.34	0.50	ug/l	J	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,1-Dichloroethene	75-35-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2,4-Trimethylbenzene - TIC	95-63-6																				
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
1,2-Dibromoethane	106-93-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichlorobenzene	95-50-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichloroethane	107-06-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,2-Dichloropropane	78-87-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,3,5-Trimethylbenzene - TIC	108-67-8																				
1,3-Dichlorobenzene	541-73-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
1,4-Dioxane - TIC	123-91-1																				
1H-Indene, 2,3-dihydro-1,6-dimethyl - TIC	TIC9																				
1H-Indene, 2,3-dihydro-4,5,7-trimethyl - TIC	TIC5																				
1H-Indene, 2,3-dihydro-4,6-dimethyl - TIC	TIC8																				
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC17																				
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC6																				
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---
2-Butenal, (E) - TIC	123-73-9																				
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
2-Methyl-2-propanol - TIC	75-65-0																				
3-Phenylbut-1-ene - TIC	934-10-1																				
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	76-64-1	3.3	5.0	ug/l	J	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.7	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Benzene, (2-bromocyclopropyl) - TIC	TIC19																				
Benzene, (2-bromocyclopropyl) - TIC	TIC3																				
Benzene, (3-methyl-2-butenyl) - TIC	TIC14																				
Benzene, (3-methyl-2-butenyl) - TIC	TIC4																				
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi - TIC	TIC1																				
Benzene, 1,2,3,4-tetramethyl - TIC	488-23-3																				
Benzene, 1,2,3,5-tetramethyl - TIC	527-53-7																				
Benzene, 1,2,3-trimethyl - TIC	526-73-8																				
Benzene, 1,2,4-tetramethyl - TIC	TIC18																				
Benzene, 1,2,4,5-tetramethyl - TIC	TIC2																				
Benzene, 1,2,4,5-tetramethyl - TIC	TIC5																				
Benzene, 1,2,4,5-tetramethyl - TIC	TIC7																				
Benzene, 1,2-diethyl - TIC	135-01-3																				
Benzene, 1-ethyl-4-ethyl - TIC	TIC13																				
Benzene, 1-ethyl-4-ethyl - TIC	TIC2																				
Benzene, 1-ethyl-2,4-dimethyl - TIC	874-41-9																				
Benzene, 1-methyl-2-(1-methylethyl) - TIC	TIC16																				
Benzene, 1-methyl-3-(1-methylethyl) - TIC	TIC4																				
Benzene, 1-methyl-4-propyl - TIC	TIC20																				
Benzene, 2,4-dimethyl-1-(1-methylethyl) - TIC	TIC15																				
Benzene, 2-buteno - TIC	TIC3																				
Benzene, 2-ethenyl-1,4-dimethyl - TIC	2039-89-6																				
Benzene, 4-ethyl-1,2-dimethyl - TIC	934-80-5																				
Bromoform	75-25-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Bromomethane	74-83-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Carbon disulfide	75-15-0	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Carbon tetrachloride	56-23-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chlorobenzene	108-90-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chlorodibromomethane	124-48-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chloroethane	75-00-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.4	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chloroform	67-66-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Chloromethane	74-87-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.14	1.0	ug/l	J	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclopentane, methyl - TIC	96-37-7																				
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Dichlorofluoromethane - TIC	75-43-4																				
Ethyl ether - TIC	60-29-7																				
Ethylbenzene	100-41-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---
Hexane - TIC																					

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: TestAmerica - Nashville  
 Laboratory Submittal: 79645-1

Analyte	Sample Name: PAB-01-060215				PAB-02-060215				PMP-180-060315				PMP-230-060315			
	Lab Sample ID: 490797816				490797817				490797818				490797819			
	Sample Date: 6/2/2015				6/2/2015				6/3/2015				6/3/2015			
	Cas No.	Report	Valid	Result	Report	Valid	Result	Report	Valid	Report	Valid	Result	Report	Valid	Report	Valid
<b>GC/MS VOC</b>																
<u>OSW-8260C</u>																
1,1,1-Trichloroethane	71-55-6	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,1,2-Trichloroethane	79-00-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,1-Dichloroethane	75-34-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.39	0.50	ug/l	J	ND	0.50	ug/l
1,1-Dichloroethene	75-35-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,2,4-Trichlorobenzene	120-82-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,2,4-Trimethylbenzene - TIC	95-63-6															
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l
1,2-Dibromoethane	106-93-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,2-Dichlorobenzene	95-50-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.38	0.50	ug/l
1,2-Dichloroethane	107-06-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,2-Dichloropropane	78-87-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
1,3,5-Trimethylbenzene - TIC	108-67-8															
1,3-Dichlorobenzene	541-73-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.92	0.50	ug/l
1,4-Dichlorobenzene	106-46-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.44	0.50	ug/l	J	2.8	0.50	ug/l
1,4-Dioxane - TIC	123-91-1													150	200	ug/l
1H-Indene, 2,3-dihydro-1,6-dimethyl - TIC	TIC9															
1H-Indene, 2,3-dihydro-4,5,7-trimethyl - TIC	TIC5															
1H-Indene, 2,3-dihydro-4,6-dimethyl - TIC	TIC8															
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC17															
1H-Indene, 2,3-dihydro-4,7-dimethyl - TIC	TIC6															
2-Butanone (MEK)	78-93-3	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l	---	ND	50	ug/l
2-Butenal, (E) - TIC	123-73-9															
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l
2-Methyl-2-propanol - TIC	75-65-0															
3-Phenylbut-1-ene - TIC	934-10-1															
4-Methyl-2-pentanone (MIBK)	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l
Acetone	67-64-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	5.4	0.50	ug/l	---	25	0.50	ug/l
Benzene, (2-bromocyclopropyl) - TIC	TIC19															
Benzene, (2-bromocyclopropyl) - TIC	TIC3															
Benzene, (3-methyl-2-butenyl) - TIC	TIC14															
Benzene, (3-methyl-2-butenyl) - TIC	TIC4															
Benzene, 1,1'-(1,5-hexadiene-1,6-diyl)bi - TIC	TIC1															
Benzene, 1,2,3,4-tetramethyl - TIC	488-23-3															
Benzene, 1,2,3,5-tetramethyl - TIC	527-53-7															
Benzene, 1,2,3-trimethyl - TIC	526-73-8															
Benzene, 1,2,4,5-tetramethyl - TIC	TIC18															
Benzene, 1,2,4,5-tetramethyl - TIC	TIC2															
Benzene, 1,2,4,5-tetramethyl - TIC	TIC5															
Benzene, 1,2,4,5-tetramethyl - TIC	TIC7															
Benzene, 1,2-diethyl - TIC	135-01-3													3.3	---	ug/l
Benzene, 1-ethyl-4-ethyl - TIC	TIC13															
Benzene, 1-ethyl-4-ethyl - TIC	TIC2															
Benzene, 1-ethyl-2,4-dimethyl - TIC	874-41-9															
Benzene, 1-methyl-2-(1-methylethyl) - TIC	TIC16															
Benzene, 1-methyl-3-(1-methylethyl) - TIC	TIC4															
Benzene, 1-methyl-4-propyl - TIC	TIC20															
Benzene, 2,4-dimethyl-1-(1-methylethyl) - TIC	TIC15															
Benzene, 2-butenyl - TIC	TIC3															
Benzene, 2-ethenyl-1,4-dimethyl - TIC	2039-89-6															
Benzene, 4-ethyl-1,2-dimethyl - TIC	934-80-5															
Bromoform	75-25-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Bromomethane	74-83-9	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Carbon disulfide	75-15-0	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Carbon tetrachloride	56-23-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Chlorobenzene	108-90-7	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.2	0.50	ug/l	---	13	0.50	ug/l
Chlorodibromomethane	124-48-1	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Chloroethane	75-00-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	14	0.50	ug/l	---	8.0	0.50	ug/l
Chloroform	67-66-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Chloromethane	74-87-3	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
cis-1,2-Dichloroethene	156-59-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.38	0.50	ug/l	J	ND	0.50	ug/l
cis-1,3-Dichloropropene	10061-01-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Cyclohexane	110-82-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.76	1.0	ug/l	J	1.4	1.0	ug/l
Cyclopentane, methyl - TIC	96-37-7															
Dichlorobromomethane	75-27-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Dichlorofluoromethane	75-71-8	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.28	0.50	ug/l	J			
Dichlorofluoromethane - TIC	75-43-4															
Ethyl ether - TIC	60-29-7													0.93	5.0	ug/l
Ethylbenzene	100-41-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Freon-113	76-13-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l
Hexane - TIC	110-54-3									0.21	0.50	ug/l	J	0.21	0.50	ug/l
Indan, 1-methyl - TIC	767-58-8															
Indane - TIC	496-11-7															
Isopropyl alcohol - TIC	67-63-0															
Isopropylbenzene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.81	1.0	ug/l	J	4.9	1.0	ug/l
Methyl acetate	79-20-9	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l
Methyl methacrylate - TIC	80-62-6													0.68	5.0	ug/l
Methyl tert-butyl ether	1634-04-4	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Methylcyclohexane	108-87-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.20	0.50	ug/l	J	0.23	0.50	ug/l
Methylene Chloride	75-09-2	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l	---	ND	3.0	ug/l
n-Butylbenzene - TIC	104-51-8															
N-Propylbenzene - TIC	103-65-1													0.62	0.50	ug/l
Naphthalene - TIC	91-20-3													2.9	5.0	ug/l
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime - TIC	TIC10															
Naphthalene, 1,2,3,4-tetrahydro-1,8-dime - TIC	TIC11															
o-Xylene - TIC	95-47-6															
Styrene	100-42-5	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l	---	ND	0.50	ug/l
Tetrachloroethene	127-18-4															

## **APPENDIX 4**

## Qualified Results Summary

ADENa Project ID: E203361  
Laboratory: TestAmerica - Nashville  
Laboratory Submittal: 79645-1

## **APPENDIX 5**

### EPA Sample Holding Time and Preservation Requirements

<i>Parameter</i>	<i>Reference Method</i>	<i>Matrix</i>	<i>Preservation &amp; Storage</i>	<i>Holding Times</i>
Volatile Organics by GCMS	OSW-8260C	Water	Acidify pH<2 Refrigeration 0-6°C	14 days

**ATTACHMENT A**

**CHAIN OF CUSTODY DOCUMENT(S)**





## **Cornerstone**

### Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: SC-1  
Date: 6/2/15 Sampled By: ATV & JHK  
Sampling Time: 9:45 Recorded By: ATV & JHK  
Weather: Overcast, 50 F, raining Replicate/Split:

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump		
Casing Diameter:	2"	Screen Interval:	From	103'	to
Total Depth:	69.77'	Pump intake depth:	103'		
Depth to Water:	14.37'				
Water Column:	55.40	Total Volume Purged:	2.54 Gallons		
Gallons/Foot:	0.163	Pump on:	9:05	Off:	9:55
Gallons in Well:	9.03				

## OBSERVATIONS DURING SAMPLING

Well Condition: Good -- a lot of ants living in cap

Purge Water Disposal: To ground

Color: slightly brown

Turbidity(qualitative): OK, slightly turbid

Odor: Moderate Petroleum Odor

Other (OVA, HNU,etc.):                    0

## **Cornerstone**

### Groundwater Sampling Form

Project Number:	140802	Task:	004	Well ID:	OB-11R
Date:	6/1/15	Sampled By:	JHK & ATV		
Sampling Time:	14:55	Recorded By:	ATV & JHK		
Weather:	Drizzling, 55F	Replicate/Split:			

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>			
Casing Diameter:	2"	Screen Interval:	From	25'	to	40'
Total Depth:	38.10	Pump intake depth:	32'			
Depth to Water:	16.04					
Water Column:	22.06	Total Volume Purged:	2.01 Gallons			
Gallons/Foot:	0.163	Pump on:	14:15	Off:	15:00	
Gallons in Well:	3.60					

### **OBSERVATIONS DURING SAMPLING**

Well Condition: Good  
Color: Clear  
Odor:

Purge Water Disposal: To ground  
Turbidity(qualitative): Cloudy  
Other (OVA, HNU,etc.): 0

Cornerstone

## Groundwater Sampling Form

Project Number:	140802	Task:	004	Well ID:	OB-20A
Date:	6/15	Sampled By:	ATV & JHK		
Sampling Time:	10:50	Recorded By:	ATV & JHK		
Weather:	Overcast/Cool/Drizzle/60F	Replicate/Split:	MS / MSD		

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013026	236257	Horbia U-52	552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump			
Casing Diameter:	2"	Screen Interval:	From	5'	to	20'
Total Depth:	20.50	Pump intake depth:	17.5			
Depth to Water:	15.21					
Water Column:	5.29	Total Volume Purged:	1.19 Gallons			
Gallons/Foot:	0.163	Pump on:	9:30	Off:	11:00	
Gallons in Well:	0.86					

## FIELD PARAMETERS

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good: ants living in casing

Purge Water Disposal: To ground

Color: Clear

Turbidity(qualitative): Clear

Oder: None

Other (OVA, HNII etc.):

**Cornerstone**  
Groundwater Sampling Form

1 of 1

Project Number: 140802 Task: 004 Well ID: OB- 20 B  
Date: 6/1/15 Sampled By: ATV & JHK  
Sampling Time: 12:20 Recorded By: ATV & JHK  
Weather: Raining, 50F Replicate/Split: DUP

## INSTRUMENT IDENTIFICATION

	PID	Water-Level Meter		Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>		
Casing Diameter:	2"	Screen Interval:	From 24' to 34'		
Total Depth:	35.90	Pump intake depth:	30'		
Depth to Water:	14.68				
Water Column:	21.22	Total Volume Purged:	2.11 Gallons		
Gallons/Foot:	0.163	Pump on:	11:40	Off:	12:30
Gallons in Well:	3.46				

## OBSERVATIONS DURING SAMPLING

Well Condition: Good  
Color: Clear  
Odor: None

Purge Water Disposal: To ground  
Turbidity(qualitative): Clear  
Other (OVA, HNU,etc.):

**Cornerstone**  
Groundwater Sampling Form

Project Number:	140802	Task:	004	Well ID:	OB-27
Date:	6/1/15	Sampled By:	ATV & JHK		
Sampling Time:	13:45	Recorded By:	ATV & JHK		
Weather:	overcast, 55F, drizzling	Replicate/Split:			

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	Minirae 013626	Solinist	236257	Horbia U-52	552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump		
Casing Diameter:	2"	Screen Interval:	From	24.5'	to
Total Depth:	40.15	Pump intake depth:			39.5'
Depth to Water:	14.01				30'
Water Column:	26.14	Total Volume Purged:			2.32 Gallons
Gallons/Foot:	0.163	Pump on:	13:05	Off:	13:55
Gallons in Well:	4.26				

## OBSERVATIONS DURING SAMPLING

Well Condition: Good      Purge Water Disposal: To ground  
Color: Cloudy      Turbidity(qualitative): clear  
Odor:      Other (OVA, HNU,etc.):

**Cornerstone**  
Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: RW-6A  
Date: 6/1/15 Sampled By: Atv & JHK  
Sampling Time: 15:50 Recorded By: Atv & JHK  
Weather: Raining, 50F Replicate/Split:

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist 236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump		
Casing Diameter:	2"	Screen Interval:	From 59' to 78'		
Total Depth:	80.25	Pump intake depth:	63'		
Depth to Water:	14.01				
Water Column:	66.24	Total Volume Purged:	1.11 Gallons		
Gallons/Foot:	0.163	Pump on:	15:20	Off:	15:55
Gallons in Well:	10.80				

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good; casing very rusted      Purge Water Disposal: To ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor:      Other (OVA, HNU,etc.):

Cornerstone

## Groundwater Sampling Form

Project Number:	140802	Task:	004	Well ID:	RW-6
Date:	6/2/15	Sampled By:	ATV & JHK		
Sampling Time:	10:50	Recorded By:	ATV & JHK		
Weather:	48F, drizzling	Replicate/Split:			

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist 236257	Horbia U-52	552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>			
Casing Diameter:	2"	Screen Interval:	From	99'	to	119'
Total Depth:	120.80	Pump intake depth:				110'
Depth to Water:	13.33					
Water Column:	107.47	Total Volume Purged:				2.59 Gallons
Gallons/Foot:	0.163	Pump on:	10:10		Off:	11:00
Gallons in Well:	17.52					

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good, rusted casing  
Color: Clear  
Odor: None

Purge Water Disposal: To ground  
Turbidity(qualitative): Clear  
Other (OVA, HNU,etc.):

## **Cornerstone**

### Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: PMP-50  
Date: 6/2/15 Sampled By: ATV & JHK  
Sampling Time: 13:05 Recorded By: ATV & JHK  
Weather: raining, 50F Replicate/Split:

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

#### PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low flow bladder</b>		
Casing Diameter:	2"	Screen Interval:	From	40'	to
Total Depth:	>240'	Pump intake depth:	60'		
Depth to Water:	7.01		50		
Water Column:	?	Total Volume Purged:	3.49 Gallons		
Gallons/Foot:	?	Pump on:	11:50	Off:	13:10
Gallons in Well:	?				

### **OBSERVATIONS DURING SAMPLING**

Well Condition: Good Purge Water Disposal: To Ground  
Color: Clear Turbidity(qualitative): Clear  
Odor: None Other (OVA, HNU,etc.): 0

## **Cornerstone**

### Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: PMP-180  
Date: 6/3/15 Sampled By: ATV & JHK  
Sampling Time: 9:30 Recorded By: ATV & JHK  
Weather: cool, 60F, overcast Replicate/Split:

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist 236257	Horbia U-52	552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	<b>Low flow bladder</b>		
Casing Diameter:	2"	Screen Interval:	From	170'	to
Total Depth:	>240'	Pump intake depth:	180		
Depth to Water:	8.18	Total Volume Purged:	3.57 Gallons		
Water Column:	?	Pump on:	8:40	Off:	9:40
Gallons/Foot:	?				
Gallons in Well:	?				

### **OBSERVATIONS DURING SAMPLING**

Well Condition: Good Purge Water Disposal: To Ground  
Color: Clear Turbidity(qualitative): Clear  
Odor: None Other (OVA, HNU,etc.): 0

## **Cornerstone**

Project Number: 140802 Task: 004 Well ID: PMP-230  
Date: 6/3/15 Sampled By: ATV & JHK  
Sampling Time: 10:45 Recorded By: ATV & JHK  
Weather: Overcast / cold Replicate/Split:

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

#### PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low flow bladder</b>		
Casing Diameter:	2"	Screen Interval:	From	220'	to
Total Depth:	>240'	Pump intake depth:	230		
Depth to Water:	7.80	Total Volume Purged:	3.17 Gallons		
Water Column:	?	Pump on:	10:00	Off:	10:50
Gallons/Foot:	?				
Gallons in Well:	?				

## OBSERVATIONS DURING SAMPLING

Well Condition: Good      Purge Water Disposal: To Ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: None      Other (OVA, HNU,etc.): 0